



CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle

FOR THE YEAR 1926

BY

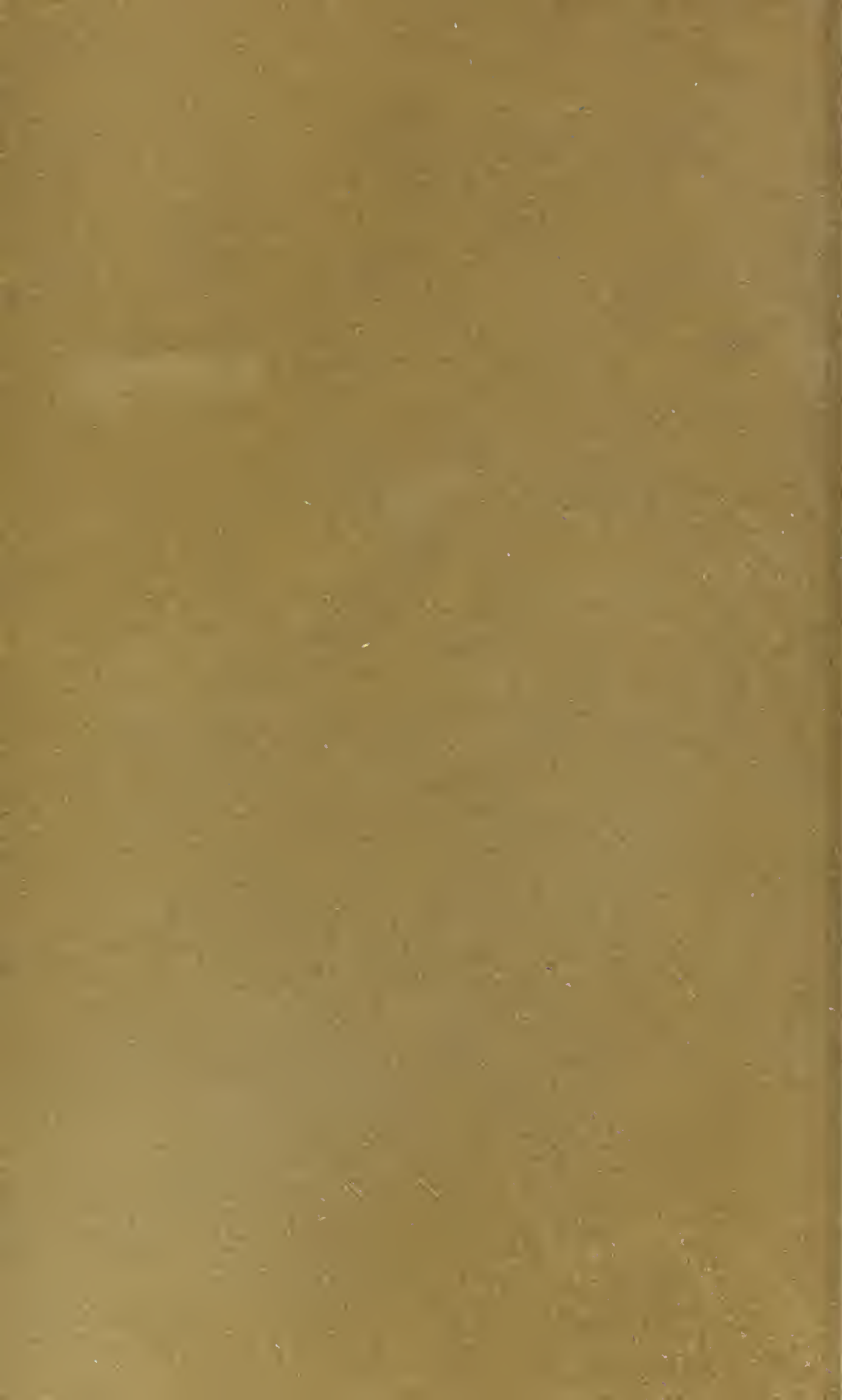
JOSEPH BEARD,

F.R.S. (Edin.), F.R.C.S. (Edin.),
L.R.C.P. (Lond.), D.P.H. (Cantab.), etc.,
(Of Gray's Inn, Barrister-at-Law).

Medical Officer of Health,
School Medical Officer,
Chief Tuberculosis Officer, &c.

COMPILED BY

GEORGE THOMSON & SONS, PRINTERS, 11, FLEET STREET, E.C.4.





CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle

FOR THE YEAR 1926

BY

JOSEPH BEARD,

F.R.S. (Edin.), F.R.C.S. (Edin.),
L.R.C.P. (Lond.), D.P.H. (Cantab.), etc.,
(Of Gray's Inn, Barrister-at-Law).

Medical Officer of Health,
School Medical Officer,
Chief Tuberculosis Officer, &c.

CARLISLE :

CHAS. THURNAM & SONS, PRINTERS, 11 ENGLISH STREET.

INDEX.

PAGE.	PAGE.
Ambulance .....15	Meat Inspection 29, 30, 73, 76
Bacteriological Work 17, 18, 21	Midwives .....17
Births .....6, 7, 11, 12	Milk Supply ...26, 27, 68, 74
Bye-laws, &c. ....19	Mortuary .....13
Cancer .....13	Nuisances .....71
Cerebro-Spinal Fever .....36	Nursing .....17, 53
Chemical Work .....17, 22	Offensive Trades ...75
Chief Inspector's Report 70-83	Ophthalmia Neonatorum 65, 66
Clinics, List of .....16	Pneumonia .....35
Common Lodging Houses 72	Polio-myelitis .....67
Dairies, Cowsheds, and	Population .....6
Milkshops .....26, 74	Puerperal Fever .....64, 65
Deaths .....7-13	Rainfall .....20
Diarrhœa .....66	Rat Repression .....76
Diphtheria .....32, 33	Refuse Disposal .....75, 78
Disinfection .....76, 78	Sanitary Circumstances 21-23
Drainage .....23, 71	Scarlet Fever .....32
Dysentery .....35	Shops Acts .....76
Encephalitis Lethargica ...36	Slaughter-houses 30, 73, 74, 78
Enteric Fever .....34	Smallpox .....33, 34
Factories and Workshops	Smoke Nuisances .....73
72, 79-81	Social Conditions .....5
Food .....26-30, 73-78	Stable Premises .....72
Food and Drugs Acts ...74, 77	Staff .....3
Hospitals .....11, 14	Statistical Summary .....5
Housing 23-25, 70, 71, 82, 83	Stillbirths .....57, 58
Illegitimacy .....64	Tuberculosis .....36-46
Infant Mortality .....59-64	Typhoid Fever .....34
Infectious Diseases ...30-36, 76	Typhus Fever .....34
Influenza .....35	Urinals .....75
Inquests .....13	Van Dwellings .....72
Malaria .....35	Venereal Diseases .....47-49
Maternity and Child Welfare	Veterinary Inspector's Report
50-67	67-69
Maternity Home .....53-55	Water Supply .....21-23

PUBLIC HEALTH STAFF

including all who are employed in work connected with the public health, whether under the Health, Maternity and Child Welfare, or the Education Committees:—

Medical Officer of Health, School	JOSEPH BEARD, F.R.C.S., D.P.H.,
Medical Officer, Chief Tuberculosis Officer, &c., &c.	&c., &c.
Assistant Medical Officer of Health, Tuberculosis Officer, and Assistant School Medical Officer	ALLAN SEMPLE, M.B., Ch. B., D.P.H.
Assistant School Medical Officer and Assistant Medical Officer (M. & C. W.)	Miss E. E. BOURNE, M.B., Ch.M., D.P.H.
Assistant Medical Officer (V.D.) (part-time)	ALEX. C. B. McMURTRIE, M.D., F.R.C.S., D.P.H.
Dental Surgeon (part-time)	WILLIAM TAYLOR, L.D.S.
Veterinary Inspector (part-time)	R. CRAIG ROBINSON, M.R.C.V.S.
Chief Sanitary Inspector, and Inspector under Sale of Food and Drugs Acts and Shops Acts	* C. W. HILL
Assistant Sanitary Inspectors	‡†* W. HANSON
	* E. S. BROADHEAD
Health Visitors	Misses H. M. HILL, J. G. SMITH, C. STORDY
Nurse in charge of School Clinic and Tuberculosis Dispensary	Miss M. E. GLOYNE
School Nurses	Misses J. S. GUTHRIE, J. H. BRADEN, G. HUNTER
Matron of Maternity Hospital	Miss M. C. WALKER
Clerks	G. E. BARROW, R. F. THOBURN, L. OATES, Misses L. HIND and M. PURDAM
Disinfectors	H. PORTER
Superintendent of Public Slaughter-houses	*‡R. T. BLAYLOCK
Public Analyst (part-time)	CYRIL J. H. STOCK, B.Sc., F.I.C., CARLISLE AND DARLINGTON
Bacteriologists (part-time)	THE PUBLIC HEALTH LABORATORY, MANCHESTER (Prof. W. W. C. TOPLEY) AND THE CLINICAL RESEARCH ASSOCIATION, LONDON

* Sanitary Inspectors' Certificate, R.S.I.

† Sanitary Inspectors' Certificate, S.I.A.

‡ Meat Inspectors' Certificate, R.S.I.



To the Chairman and Members of the Health Committee.
Ladies and Gentlemen,

I have the honour to submit the Annual Report on the Health of the City for the year 1926, this being my Nineteenth Annual Report as Medical Officer of Health.

The Report has been prepared as far as practicable in accordance with the requirements of Circular 743 of the Ministry of Health, of the 20th December, 1926, consideration having been given to the recording of such particulars as may be required for future reference.

I am,

Ladies and Gentlemen,

Your obedient Servant,

JOSEPH BEARD,

Medical Officer of Health.

Public Health Department,

19 Fisher Street,

Carlisle,

May, 1927.

STATISTICS AND SOCIAL CONDITIONS.

General Statistics.

Area (acres)	...	...	...	...	4,488
Population (Census, 1921)	...	...	...	...	53,200
Population (1926), Estimate of Registrar-General					
for Birth-rate	...	...	...	...	56,320
Population (1926), Estimate of Registrar-General					
for Death-rate	...	...	...	...	56,140
Number of Inhabited Houses (Census, 1921)	...				11,316
Number of Families (Census, 1921)	...			...	11,742
Rateable Value	...	...	...	...	£331,613
Sum represented by a Penny Rate	...			...	£1,238

Extracts from Vital Statistics of the Year.

Births—	Total.	M.	F.	
Legitimate	1,090	574	516	
Illegitimate	69	30	39	
				Birth-rate 20.5
Deaths	...	729	379	350
				Death-rate 12.9

Number of women dying in, or in consequence
of, childbirth—

From Sepsis	...	...	...	2
From other causes	...	...	...	5

Deaths of Infants under one year of age per
1,000 births—

Legitimate	...	...	83.5	
Illegitimate	...	...	57.9	
		—	Total	... 81.9

Deaths from Measles (all ages)	..	...	13
,, Whooping Cough (all ages)	...	...	11
,, Diarrhoea (under 2 years of age)	...	...	14

Population.

An estimate of the population at mid-year, 1926, has been supplied to me by the Registrar-General, and is as follows:—for the purpose of the calculation of mortality rates 56,140, and for the calculation of the birth-rate 56,320. These figures have been used in making the various calculations in this report.

Births.

The number of births registered during the year was 1,159, an increase of 114 on the figure for the previous year, and the birth-rate is 20.5 per 1,000 of the population, or an increase of 1.7 on the figure for 1925.

The birth-rate for the whole of England and Wales during 1926 was 17.8 per 1,000. The rate for the 105 great towns, to which classification Carlisle belongs, was 18.2 per 1,000, and for the 158 smaller towns of England and Wales 17.6 per 1,000.

Year.	Number of Births Registered.			Per 1,000 of the population.
	Males.	Females.	Total.	
1921	679	631	1310	24.6
1922	641	626	1267	23.6
1923	589	592	1181	21.8
1924	548	568	1116	20.3
1925	530	515	1045	18.8
1926	604	555	1159	20.5

Table showing details of the Births in the several Wards, 1926.

Quarter Ended	Stanwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	S. Cuthbert's	Caldewgate	Newtown & Belle Vue	Totals for City
March 31	18	37	24	32	25	43	32	36	37	21	305
June 30	11	25	21	32	29	31	42	32	45	26	294
September 30 ...	18	33	29	27	28	48	39	28	31	31	312
December 31 ...	19	37	14	21	23	40	20	21	24	29	248
Totals	66	132	88	112	105	162	133	117	137	107	1159

Illegitimate Births.

The number of illegitimate births registered was 69, or 59.5 per 1,000 of the total births. This shows an increase of 13 illegitimate births upon the figure for 1925.

In 14 instances, or 20.3 per cent. of the total illegitimate births for the year, the mother was not a resident of the City.

The distribution of the illegitimate births among the several wards was as follows:—

	Stanwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	S. Cuthbert's	Caldewgate	Newtown & Belle Vue	Totals for City
Males	1	3	2	6	2	5	5	1	4	1	30
Females	2	4	5	5	3	6	4	3	6	1	39
Totals	3	7	7	11	5	11	9	4	10	2	69

Deaths.

The total number of deaths registered was 821, as compared with 848 in 1925. 18 deaths occurred of persons belonging to the City in institutions and other

places away from Carlisle, while the deaths of 110 persons not belonging to the City occurred in public institutions and other places within the City. Excluding the latter figure, and adding the deaths of Carlisle residents which occurred in other districts, a nett figure of 729 remains, which is equal to a nett death-rate of 12.9 per 1,000 of the estimated population at all ages, against 13.5 per 1,000 in 1925.

The corrected death-rate for the City, which is obtained by multiplying the above nett death-rate of 12.9 per 1,000 by the factor supplied by the Registrar-General, viz., .947, is 12.2 per 1,000 of the estimated population living at all ages.

The death-rate for the whole of England and Wales during 1926 was 11.6 per 1,000. The rate for the 105 great towns, to which classification Carlisle belongs, was 11.6 per 1,000, and for the 158 smaller towns of England and Wales, 10.6 per 1,000.

Table showing details of Deaths of Residents in the various Wards, 1926.

QUARTER ENDED.	STANWIX AND ETERBY.	RICKERGATE.	AGLIONBY.	GREYSTONE.	ST. NICHOLAS.	CURROCK.	DENTON HOLME.	ST. CUTHBERT'S.	CALDEWATE.	NEWTOWN AND BELLE VUE.	TOTALS FOR CITY.
March 31	11	26	17	21	22	18	34	18	32	14	213
June 30.....	13	21	26	29	10	18	15	20	16	9	177
September 30 ...	9	12	19	16	10	14	15	11	20	16	142
December 31.....	9	22	14	29	14	23	19	28	21	18	197
Totals.. . . .	42	81	76	95	56	73	83	77	89	57	729

Table showing the number of Deaths at all Ages and at several age periods, 1926.

	All Ages.	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up- wards.
No. of Deaths at all ages and at several age periods	729	95	51	22	29	251	281

The following Table shows the diseases causing the largest number of Deaths during 1926, and a comparison with those of 1925, &c.:—

DISEASE.	1925.	1926.	Increase or Decrease	Average No. of Deaths for past 10 yrs.
Pulmonary Tuberculosis & Phthisis	49	48	— 1	48
Other forms of Tuberculosis ...	7	15	+ 8	17
Pneumonia	35	44	+ 9	50
Other Diseases of Respiratory System	65	48	— 17	58
Measles	8	18	+ 10	11
Influenza	21	7	— 14	33
Whooping Cough	7	11	+ 4	9
Diphtheria, Membranous Croup ...	2	10	+ 8	6
Disease of Heart and Blood Vessels	159	157	— 2	160
Rheumatic Fever, Chronic Rheu- matism, Rheumatoid Arthritis ..	11	3	— 8	7
Cancer and Malignant Disease ...	84	67	— 17	67
Diseases of Digestive System other than Diarrhoea and Enteritis ...	35	26	— 9	26
Diseases of Genito-Urinary System	29	32	+ 3	29
Diseases of Nervous System ...	76	73	— 3	54
Prematurity and Injury at Birth, &c.	34	40	+ 6	41
Accidents due to Negligence ..	20	24	+ 4	19
Diarrhoea and Enteritis ...	21	21	...	22

+ Shows an increase in the number of deaths.

— Shows a decrease in the number of deaths

The following Table sets out the Cause and the Ages at Death
of 729 persons belonging to the City:—

CAUSE OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS" IN INSTITUTIONS IN THE DISTRICT.
		All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards	
1		2	3	4	5	6	7	8	9	10	11
All Causes	Certified	712	91	21	29	22	28	81	164	276	284
	Uncertified	17	4	1	...	...	1	1	5	5	1
Enteric Fever		...	...	...	...	...	...	...	...	...	...
Smallpox		...	...	...	...	...	...	...	...	...	2
Measles		18	6	6	6	...	...	...	...	...	2
Scarlet Fever		4	...	1	1	1	1	...	...	...	3
Whooping Cough		11	5	5	1	...	...	...	...	...	...
Diphtheria and Croup		10	...	...	5	6	...	...	...	...	6
Influenza		7	...	...	...	...	...	3	1	3	...
Dysentery		...	...	...	...	...	...	...	...	...	...
Erysipelas		1	...	...	...	...	...	...	1	...	1
Phthisis (Pulmonary Tuberculosis)		45	...	...	...	3	9	23	12	1	9
Tuberculous Meningitis		8	1	1	3	3	...	...	...	...	3
Other Tuberculous Diseases		7	...	1	...	...	1	2	...	1	6
Cancer, Malignant Disease		67	...	...	...	...	...	5	32	30	40
Rheumatic Fever		3	...	...	...	2	...	...	...	1	...
Meningitis		1	...	...	...	...	...	1	...	...	1
Organic Heart Disease		89	...	...	...	...	...	8	20	61	14
Bronchitis		42	6	1	...	...	...	1	9	25	14
Pneumonia (all forms)		44	9	3	9	1	4	3	8	7	9
Other Diseases of Respiratory Organs		6	...	...	...	...	...	1	1	4	...
Diarrhoea and Enteritis		21	12	2	...	...	...	1	4	2	11
Appendicitis and Typhlitis		2	...	...	...	...	1	...	1	...	7
Cirrhosis of Liver		5	...	...	...	...	...	1	3	1	2
Alcoholism		...	...	...	...	...	...	...	...	...	...
Nephritis and Bright's Disease		28	...	...	...	1	1	4	11	6	10
Puerperal Fever		2	...	...	...	...	2	...	...	...	1
Other Accidents and Diseases of Preg- nancy and Parturition		5	...	...	...	...	1	4	...	...	...
Congenital Debility & Malformation, including Premature Birth		48	47	1	...	...	...	...	...	...	9
Violent Deaths, excluding Suicide		24	...	...	1	3	3	7	6	4	18
Suicide		6	...	...	...	...	...	3	2	1	3
Other Defined Diseases		227	9	1	3	3	6	15	55	134	116
Diseases ill-defined or unknown		...	...	...	...	...	...	...	...	...	...
Totals		729	95	22	29	22	29	82	169	281	285
Sub- Entries included in above figures	Cerebro-spinal Meningitis	...	...	...	...	...	...	1	...	...	1
	Polionyelitis	...	...	...	...	...	...	...	...	...	...
	Typhus Fever	...	...	...	...	...	...	...	...	...	...
	Lobar Pneumonia	11	...	1	...	...	...	...	...	...	...
	Pneumonia not defined	9	4	...	2	1	...	3	1	3	5
				...			...	...	...	2	...

**The following Table shows the Vital Statistics for
the whole City during 1926 and previous years:—**

YEAR.	Registrar-General's Estimate of Population to Middle of each Year	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncorrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of age		AT ALL AGES.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1917	59,151 53,064	1117	1120	13.9	826	15.5	101	46	119	106.5	771	14.5
1918	60,188 53,717	1033	1037	17.2	921	17.1	120	49	131	126.8	850	15.8
1919	57,500 55,198	1066	1078	18.7	778	14.1	112	54	115	107.9	720	13.6
1920	57,697 57,397	1425	1417	24.7	785	13.7	117	37	114	80.0	705	12.3
1921	53,200	1310	1298	24.6	818	15.3	85	21	138	105.3	754	14.1
1922	53,490	1267	1267	23.6	864	16.1	101	21	103	81.2	784	14.6
1923	54,010	1181	1171	21.8	797	14.7	91	26	98	82.9	732	13.5
1924	54,910	1116	1123	20.3	849	15.4	103	17	106	94.9	763	13.8
1925	* 55,360 + 55,160	1045	1030	18.8	848	15.3	122	22	82	78.4	748	13.5
1926	* 56,320 + 56,140	1159	1163	20.5	821	14.6	110	18	95	81.9	729	12.9

* For Birth-rate.

+ For Death-rate.

**The following Public and other Institutions are
within the City:—**

The Union Workhouse and its Infirmary.
 The Cumberland Infirmary.
 Carlisle Non-Provident Dispensary.
 The Crozier Lodge Isolation Hospital.
 Strathclyde House (Home for Incurables).
 St. Joseph's Home (aged and infirm persons).
 Corporation Dispensary and School Clinic.
 Corporation Maternity Hospital and Clinics.

Birth-rate, Death-rate, and Infantile Mortality in Carlisle since 1891.

Year.	No. of Births.	Birth- rate.	No. of Deaths.	Gross Death- rate.	Infantile Mor- tality.	Average Five Years.		
						Birth- rate.	Death- rate.	Infantile Mortality.
1891	1207	30.8	789	20.1	137	31.8	20.1	142.6
1892	1213	30.5	805	20.2	123			
1893	1389	34.5	868	21.6	178			
1894	1315	32.0	780	19.2	133			
1895	1311	31.4	794	19.4	142			
1896	1246	29.6	753	18.2	137	29.9	19.5	146.6
1897	1324	30.8	811	19.4	134			
1898	1311	30.0	935	22.2	183			
1899	1300	29.4	818	19.2	145			
1900	1354	30.1	807	18.8	134			
1901	1246	27.3	810	17.8	129	26.7	17.9	131.0
1902	1245	27.0	856	18.5	117			
1903	1322	28.4	813	17.4	118			
1904	1278	26.7	933	19.7	152			
1905	1168	24.3	783	16.3	139			
1906	1227	25.3	811	16.7	132	23.6	15.1	127.5
1907	1178	23.8	848	17.1	141			
1908	1223	24.4	713	14.2	129			
1909	1149	22.6	735	14.5	123.6			
1910	1145	22.2	683	13.2	110.0			
1911	1109	23.8	776	16.7	145.0	23.2	17.1	128.2
1912	1142	24.6	813	17.5	102.4			
1913	1164	22.1	821	15.6	127.1			
1914	1209	23.0	848	16.1	122.4			
1915	1192	22.6	1027	19.5	144.3			
1916	1103	20.3	850	17.0	101.5	19.9	15.5	104.5
1917	1117	18.8	826	15.5	106.5			
1918	1033	17.1	921	17.1	126.8			
1919	1066	18.5	778	14.1	107.9			
1920	1425	24.7	785	13.7	80			
1921	1310	24.6	818	15.3	105.3	21.8	15.3	88.5
1922	1267	23.6	864	16.1	81.2			
1923	1181	21.8	797	14.7	82.9			
1924	1116	20.3	849	15.4	95.0			
1925	1045	19.8	848	15.1	78.4			
1926	1159	20.5	821	14.6	81.9	21.0	15.1	83.8

The following figures relate to the deaths of persons not normally resident in the district which occurred within the City :—

Cumberland Infirmary	...	...	78
Private Nursing Homes	...	...	20
Private Houses	...	...	4
Fusehill Hospital	...	...	7
Citadel Station	...	...	1

Inquests.

During the year the City Coroner held 49 inquests. Of this number, 38 related to deaths of persons who resided within the City, and 11 to persons who resided in other districts, but who died within the City. 6 related to children under five years of age, 2 of whom were under one year.

Mortuary.

15 bodies were removed to the Public Mortuary, a post-mortem examination being made in each instance.

Uncertified Deaths.

17 deaths were registered of persons belonging to the City in which no certificate was given by a medical man, and in which no inquest was held.

During 1925, 23 such deaths were registered.

Cancer.

The number of deaths registered as due to cancer during 1926 was 67, against 84 in 1925, the rate of mortality from this disease being 1.1 per 1,000 of the population.

This figure includes all deaths from causes coming within the general term cancer.

Table of Deaths from Cancer, 1917-1926.

Age.	Numbers.									
	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
1 to 5 years	...	...	...	...	...	...	...	...	...	...
5 to 15 years	...	1	...	1	...	...	...	...	...	...
15 to 25 years	1	1	...	...	1	1	...	1	...	...
25 to 35 years	1	1	2	1	2	...	...	1	...	2
35 to 45 years	7	5	...	5	2	4	2	5	4	3
45 to 55 years	10	13	9	15	5	12	13	10	23	6
55 to 65 years	32	21	19	12	20	22	21	20	26	26
65 to 75 years	14	17	15	17	19	15	26	25	21	21
75 & upwards	8	7	4	11	4	14	16	10	10	9
Totals	73	66	49	62	53	68	78	72	84	67

GENERAL PROVISION OF HEALTH SERVICES.

Hospitals provided or subsidised by the Local Authority.

A (1) Fever. General infectious diseases are sent to Crozier Lodge Isolation Hospital, Carlisle, 50 beds.

(2) *Smallpox.* The Corporation has provided a hospital for the isolation of smallpox a few miles out of the City, containing 12 beds.

B (1) Tuberculosis. The Corporation has a call upon 20 beds in the Blencathra Sanatorium, Threlkeld, Cumberland, in accordance with the agreement made between the Local Government Board, the Sanatorium Committee, and the Corporation.

(2) *Maternity.* A hospital has been provided by the Corporation at 3 George Street, Carlisle, containing 13 beds and a like number of infants' cots.

(3) *Children.* There is a children's ward at the Cumberland Infirmary which provides for local requirements.

(4) *Others.* None.

Institutional Treatment for Unmarried Mothers. Illegitimate Infants, and Homeless Children.

In addition to the Fusehill Institution accommodation is provided for the above classes by the North Cumberland and Carlisle City Association for Preventive and Rescue Work at Coledale Hall.

Ambulance Facilities.

(a) For infectious cases. The Corporation provide, and own a motor ambulance for the removal to hospital of cases of infectious disease, which is operated by an officer of the Public Health Department. By arrangement, the ambulance and the officer who has charge of this work, are also available for the removal to hospital of cases of infectious disease from any part of the area of the Carlisle Rural District Council.

(b) For non-infectious and accident cases. A public ambulance, provided by the Corporation, for accidents and illness other than infectious disease, is kept at the Fire Station, Spring Gardens Lane, for which the following charges are made:—

For residents in the City 7/6 for each removal

For not exceeding 2 miles outside

the City 10/- ,,

For beyond 2 miles and not

exceeding 3 miles 12/6 ,,

For each additional mile thereafter

(limited to 20 miles outside

the City) 3/- per mile

Between 9 p.m. and 7 a.m. 50 per cent. additional is charged.

In cases of accidents in the streets no charge is made for the removal of persons to the Infirmary or their homes.

LIST OF EXISTING CLINICS AND INFANT WELFARE CENTRES IN THE CITY.

Nature of Centre.	Address.	Accommodation.	Provided by.
Maternity and Child Welfare (Post-natal), once weekly	Maternity Hospital, 3 George Street	Waiting, Consulting, and Weighing Rooms	Carlisle Corporation
Maternity and Child Welfare (Ante-natal), once weekly	Do.	Waiting, Consulting, and Dressing Rooms	Do.
Infant Welfare Centre, weekly	West Walls	One Large Room	The Carlisle Mothers' and Babies' Welcome Society
Do.	St. John's Hall, South Street	Two Rooms	Do.
Do.	Caldewgate	One Room	Do.
Do.	Howie Boyd Hall, Currock	Two Rooms	Do.
School Clinic, Minor Ailments, daily	2 George Street	Three Rooms	Carlisle Corporation
Do. Dental, twice weekly	Do.	Two Rooms	Do.
Do. Special Ophthalmic Examinations, weekly	Do.	Two Rooms and Dark Room	Do.
Do. X-Ray, weekly	Do.	Two Rooms	Do.
Tuberculosis Clinics, three times weekly	1 George Street	Four Rooms and Laboratory	Do
Venereal Clinic, five sessions weekly and intermediate treatment	Cumberland Infirmary	Three Rooms	Jointly by Carlisle Corporation and the Cumberland County Council

Professional Nursing in the Home.

(a) *General.* None.

(b) *Infectious.* An annual retaining fee of £20 is paid by the Council to the Carlisle District Nursing Association, on condition that nursing facilities will be made available by them for such cases of puerperal fever, ophthalmia neonatorum, measles, whooping cough, and epidemic diarrhoea, as the Council may require them to attend. In addition, 1s. per visit is paid on account of such cases.

Midwives.

The Corporation do not employ midwives except at the Maternity Hospital, and do not pay any subsidy in respect of any midwife practising in the district.

There were 22 midwives in practice in the area at the end of the year.

Chemical Work.

This work is carried out by Cyril J. H. Stock, Esq., B.Sc., F.I.C., &c., of Darlington. The results of his analyses of the various foods, drugs, &c., for the past year are shown on pages 22 and 70.

Bacteriological Work.

28 samples of milk were submitted to the Public Health Laboratory, Manchester, for bacteriological examination, 24 being samples of fresh cows' milk and

4 of pasteurised cows' milk. These were all routine samples purchased from milkshops and carts in the City. In one instance tubercle bacilli were found. The place of production of the sample in question was outside the City, and the matter was dealt with by the County Veterinary Inspector.

Two samples of milk other than the foregoing were submitted by the Veterinary Inspector to the Clinical Research Association for bacteriological examination, in the case of a suspected animal at each of two farms. In both instances action was taken under the provisions of the Tuberculosis Order, 1925. Both animals were found to be tuberculous, and post-mortem examination in each instance revealed the disease to be in an advanced condition. The owners were compensated in accordance with the Order.

90 specimens of sputum have been examined at the Tuberculosis Dispensary, for the presence of the tubercle bacillus, in 30 of which the organism was found.

28 swabs from throats were submitted to the Clinical Research Association for examination for the Klebs Loeffler Bacillus, and in 11 instances the organism was found.

Four samples of City water, taken from a domestic tap, were submitted to the Public Health Laboratory, Manchester, for bacteriological examination. A tabulated summary of the reports is given on page 21.

The following Acts, Bye-laws, and Regulations are in force in the district, and were adopted on the dates mentioned:—

Bye-laws with respect to New Streets and Buildings under the Public Health Act, 1875	... ..	13th Oct., 1885
Regulations under the Contagious Diseases (Animals) Act, 1886, and the Dairies, Cowsheds, and Milkshops Order of 1885	... ..	16th July, 1889
The Infectious Diseases (Prevention) Act, 1890	... ..	10th March, 1891
The Public Health Acts (Amendment) Act, 1890	... ..	10th March, 1891
Bye-laws for regulating the Public Pleasure and Recreation Grounds, made in pursuance of the Public Health Act, 1875	... ..	14th Feb., 1893
Bye-laws with respect to Common Lodging-houses, made in pursuance of Section 80 of the Public Health Act, 1875	... ..	15th Aug., 1893
Bye-laws relating to the conveyance of carcases of dead animals through the streets	... ..	8th Jan., 1895
Bye-laws for regulating the Carlisle Public Slaughter-houses under the Public Health Act, 1875	... ..	12th May, 1896
Bye-laws made for regulating the carrying on of offensive trades, in pursuance of Section 113 of the Public Health Act, 1875	... ..	9th March, 1897
Baths and Wash-houses Acts	... ..	9th July, 1901
Measles Regulations, 1923	... ..	1st Jan., 1924
Public Health Acts (Amendment) Act, 1907—		
Section 86, Marine Store Dealers, and Dealers in old Metal	... ..	22nd Jan., 1914
Section 95. Miscellaneous Provisions	... ..	31st March, 1925
Part VI. Recreation Grounds	... ..	24th Aug., 1926
Section 51. Offensive Trades	... ..	10th June, 1926
Section 50. Ambulance	... ..	4th Aug., 1926
Public Health Act, 1925—		
Parts II. III. IV. and V.	... ..	9th March, 1926
Part VI	... ..	24th Aug., 1926

RAINFALL.

Observations taken at the Carlisle Cemetery by Mr. J. T. Charlton.

MONTHS.	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926.		Average for 10 years 1916-1925.
											Rainfall. days on which Rain fell.	Number of days on which Rain fell.	
January	in. 3.55	in. 1.53	in. 3.13	in. 2.88	in. 4.17	in. 5.01	in. 2.25	in. 1.74	in. 2.77	in. 2.19	in. 2.67	17	in. 2.92
February	... 3.31	... 1.13	... 2.86	... 1.05	... 2.61	... 0.16	... 2.87	... 4.08	... 0.95	... 4.82	... 3.94	19	... 2.38
March	... 2.14	... 1.98	... 0.66	... 2.35	... 3.11	... 3.71	... 1.31	... 0.84	... 1.73	... 1.27	... 1.39	16	... 1.91
April	... 2.44	... 2.45	... 0.50	... 1.49	... 2.17	... 0.86	... 1.89	... 2.55	... 1.81	... 3.27	... 1.75	16	... 1.94
May	... 2.98	... 1.91	... 1.88	... 1.10	... 3.48	... 1.28	... 1.79	... 1.98	... 3.73	... 3.48	... 2.16	20	... 2.36
June	... 3.30	... 2.01	... 0.87	... 2.66	... 2.11	... 0.65	... 2.98	... 0.60	... 1.90	... 0.40	... 3.17	15	... 1.75
July	... 4.61	... 1.31	... 3.73	... 0.87	... 4.26	... 2.44	... 4.54	... 2.22	... 4.63	... 1.97	... 2.94	16	... 3.06
August	... 2.39	... 5.64	... 3.21	... 2.96	... 2.50	... 5.39	... 2.53	... 7.42	... 3.13	... 3.18	... 2.91	16	... 3.84
September	... 2.06	... 2.61	... 7.36	... 1.81	... 1.89	... 2.15	... 2.92	... 3.01	... 3.33	... 4.08	... 5.74	15	... 3.12
October	... 5.10	... 4.33	... 4.00	... 2.36	... 1.00	... 2.56	... 1.20	... 5.61	... 4.13	... 3.73	... 3.15	16	... 3.40
November	... 4.34	... 2.83	... 2.01	... 2.36	... 2.02	... 1.68	... 0.84	... 4.06	... 1.97	... 1.06	... 4.23	23	... 2.32
December	... 2.75	... 1.40	... 3.44	... 3.32	... 2.79	... 3.94	... 3.43	... 2.42	... 5.03	... 2.72	... 0.65	12	... 3.12
Totals ...	38.97	29.13	33.65	25.21	32.11	29.83	28.55	36.53	35.11	32.17	34.70	201	32.12
Total number of days on which Rain fell {	228	176	190	191	211	205	209	231	210	189	...		204

SANITARY CIRCUMSTANCES.**Water Supply.**

Total annual distribution of Water from Cumwhinton covered reservoir during the years 1917 to 1926.

Year.	Number of Gallons.	No. of Gallons per head, per day.
1917	801,490,000	33.78
1918	795,220,000	34.58
1919	804,040,000	34.88
1920	814,170,000	35.41
1921	771,250,000	33.54
1922	750,500,000	32.98
1923	747,320,000	32.49
1924	712,630,000	30.90
1925	737,000,000	32.06
1926	758,630,000	33.00

Bacteriological Results of Quarterly Samples of Water taken from a Domestic Tap.

QUANTITATIVE ANALYSIS		1926.							
A. Aerobic micro-organisms growing in 3 days in nutrient gelatine at 20° C. to 21° C.		Number of colonies in one gramme of water.				No. of kinds clearly recognisable.			
		MAR.	JUNE.	SEPT.	DEC.	MAR.	JUNE.	SEPT.	DEC.
Non-Liquefying Bacteria ...	48	} 51	54 } 60	55 } 74	114 } 141	...	...	...	...
Liquefying Bacteria ...	3								
Other Micro-Organisms ...	...	...	..	...	...	...	...	...	...
B. Anærobic Micro-Organisms ...	...	...	...	...	...	...	...	...	...

QUALITATIVE ANALYSIS.		1926.			
A. Bacteria associated with sewage or faecal pollution		MARCH.	JUNE.	SEPT.	DEC.
		B. Coli communis found in 100 C.C. but not found in 10 C.C.	B. Coli communis found in 10 C.C. but not in 1 C.C.	B. Coli communis found in 10 C.C. but not in 1 C.C.	B. Coli communis found in 10 C.C. but not in 1 C.C.
B Bacteria associated with disease		Not found	Not found	Not found	Not found

Results of Chemical Analyses of Quarterly Samples of Water taken from a Domestic Tap.

Results shown in parts per 100,000.		1926			
CHEMICAL	MARCH.	JUNE.	SEPT.	DEC.	
Chlorine as Chlorides	1.0000	1.0000	1.0250	1.0000	
Nitrogen as Nitrates ...	trace	.0658	.0579	None	
Ammonia	None	None	None	None	
Albuminoid Ammonia	None	None	None	None	
Oxygen absorption ...	.0552	.1056	.2240	.1416
Injurious Metals (Lead and Copper) ...	None	None	None	None	
Total Solid Matter dried at 100° C. ...	13	12	11	13	
Temporary Hardness ...	7.2°	5.80°	4.80°	6.00°	
Permanent Hardness ...	2.4°	4.00	4.00°	3.60°	
Colour and Appearance in two-foot tube ...	Faint green, not quite clear	Faint green, clear	Peaty green, clear	Light peaty green, clear	
Odour when heated to 50° C.	None	None	Faint vegetable	None	
Microscopical Examina tion	Minute deposit con- sisting of earthy and vegetable matter, etc.	Minute deposit con- sisting of earthy and vegetable matter, etc.	Very minute deposit con- sisting of particles of earthy and vegetable matter, etc	Minute deposit con- sisting of particles of earthy and vegetable matter, etc.	

Rivers and Streams.

None of the water from rivers or streams in the area of the Authority is used for drinking purposes, and no necessity arose for any action to be taken in respect of pollution.

Drainage and Sewerage.
Closet Accommodation.
Scavenging.
Sanitary Inspection of
the Area.
Smoke Abatement.
Offensive Trades.

Information regarding these matters will be found on pages 71—73 and 75.

Schools.

The sanitary condition of the schools generally in the City is good. Some of the school buildings are, however, old or of an old type, but from time to time the Education Committee have effected beneficial changes by giving up the use of a school, or by reconstruction or partial reconstruction of a school. There are adequate facilities in every school in the area for an abundant supply of water, both for drinking and all sanitary purposes, under the Authority's scheme of water supply.

Neither the Local Authority nor the Education Committee have for a number of years been able to satisfy themselves that any appreciable benefit in respect of the spread of infectious disease would be likely to result from school closure, consequently the methods adopted against the prevention of the spread of infectious disease have been the various active steps taken by the officers of the Authority, and the exclusion of individual scholars.

HOUSING.

Up to the end of the year the total number of houses for the erection of which the Corporation had received the sanction of the Minister of Health was 1,344, 160 of which relate to the parlour type of house and 1,184 to the non-parlour type, which will be provided as follows:—Denton Street, 24; Boustead's Grassing, 32; Stanwix, 74; Longsowerby, 198; Blackwell Road Estate, 612; Wigton Road Estate, 188; and Raffles Estate, 216.

The total number of houses erected at the end of the year was 984, distributed as follows:—Denton Street, 24; Boustead's Grassing, 32; Stanwix, 74; Longsowerby, 98, Blackwell Road Estate, 552; Wigton Road Estate, 188; and Raffles Estate, 16.

The houses in course of erection at the end of the year comprised 60 on the Blackwell Road Estate and 200 on the Raffles Estate, all of which are of the non-parlour type.

During the year 112 houses were built by private enterprise, 90 of which, viz., 78 of the parlour type and 12 non-parlour type, were eligible for the subsidy under the provisions of the Housing, &c., Act, 1923.

At the end of the year 3 houses, all of the parlour type, which are being built by private enterprise, were in course of erection.

Number of New Houses erected during the year :—

(a) Total (including numbers given separately under (b)).	488
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority.	376
(ii) By other bodies or persons.	90
<i>1.—Unfit Dwelling Houses.</i>	
<i>Inspection.</i> —(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	
	120
(2) Number of dwelling houses which were inspected and recorded under the Housing Consolidated Regulations, 1925 ...	90
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	5
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ...	85
<i>2.—Remedy of Defects without Service of formal Notices.</i>	
Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	23

3—Action under Statutory Powers.

(a) Proceedings under Section 3 of the Housing Act, 1925—

(1) Number of dwelling houses in respect of which notices were served requiring repairs	None
(2) Number of dwelling houses which were rendered fit after service of formal notices	
(a) By Owners	None
(b) By Local Authority in default of Owners	None
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by Owners of intention to close ...	None

(b) Proceedings under Public Health Acts—

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	30
(2) Number of dwelling houses in which defects were remedied after service of formal notices	
(a) By Owners	30
(b) By Local Authority in default of Owners	None

(c) Proceedings under Sections 11, 14, and 15 of the Housing Act, 1925—

(1) Number of representations made with a view to the making of Closing Orders	None
(2) Number of dwelling houses in respect of which Closing Orders were made ...	None
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit	None
(4) Number of dwelling houses in respect of which Demolition Orders were made	None
(5) Number of dwelling houses demolished in pursuance of Demolition Orders ...	33*

*Demolished by owner following Service of Notice under Section 28 of 1919 Act. Rebuilt as business premises.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

The number of milk producers in the City is 19, the number of cowsheds 34, and the average number of cows housed therein 256.

During the year there were 15 milkshops and 61 milk purveyors on the register, 33 of the purveyors being persons whose premises are situated outside the City.

With regard to the milk supply of the City, no outbreak of acute infectious illness has occurred; some of the milk, however, leaves a good deal to be desired in respect of micro-organisms and dirt content.

The larger proportion of the fresh milk retailed in the City comes from districts outside, and is sold direct from the cans, conveyed mostly by carts, and in four instances by motor vehicle. 3 purveyors retail the whole of their milk in bottles, the milk being cooled and bottled at the time of production. 7 other purveyors sell partly from the can and partly in bottle; in 5 instances the milk is cooled and bottled at the time of production on farms in the City, and in the remaining 2 instances the milk is not bottled until after its arrival in the City from farms outside.

With regard to the administration of the Milk and Dairies Order, 1926, 44 special inspections of premises have been made, the particulars of which will be submitted at an early date to the Health Committee for any action that may be considered necessary under the provisions of the Order.

4 licences have been issued under the Milk (Special Designations) Order, 1923, 1 to the Carlisle Co-operative Society, Ltd., in respect of pasteurising plant, and 3 to retailers, 2 of which were in respect of Certified Milk, and the third in respect of Grade A (Tuberculin Tested) Milk.

There has been no refusal or revocation of registration of a retailer or of a licence for graded milk.

The following particulars, which exclude the question of tubercle bacilli, show the bacterial condition of 28 samples of milk.

PASTEURISED MILK.

No. of sample.	Date when sample was taken.	Total No. of bacteria per 1 c. c.	B. Coli present in			Total sediment (cells, cellular products, litter, dung, &c.) in parts per 100,000.
			1 c. c.	.1 c. c.	.01 c. c.	
1	1st March	54,000	+	-	-	10
2	26th May	161,000	+	+	-	20
3	16th Aug.	72,500	+	+	+	19
4	15th Nov.	120,000	+	-	-	20

RAW MILK.

No. of sample.	Date when sample was taken.	Total No. of bacteria per 1 c. c.	B. Coli present in			Total sediment (cells, cellular products, litter, dung, &c.) in parts per 100,000.
			1 c. c.	.1 c. c.	.01 c. c.	
1	1st Mar.	29,700	+	+	+	12
2	"	1,606,667	+	+	+	Not estimated on account of clotting
3	"	1,080,000	+	+	+	6
4	"	2,663,333	+	+	+	9
5	"	373,500	+	+	+	30
6	22nd April	96,000	+	+	-	24
7	"	160,000	+	+	+	27
8	"	1,300,000	+	+	+	15
9	"	840,000	+	+	+	30
10	26th May	40,000	+	+	+	10
11	"	18,150	+	+	+	11
12	"	199,500	+	+	+	8
13	"	780,000	+	+	+	13
14	"	7,300,000	+	+	+	10
15	16th Aug.	2,700,000	+	+	+	9
16	"	2,715,000	+	+	+	10
17	"	350,000	+	+	+	14
18	"	705,000	+	+	+	16
19	"	830,000	+	+	+	13
20	15th Nov.	211,000	+	+	+	9
21	"	39,200	+	+	+	13
22	"	7,150	-	-	-	50
23	"	21,225	+	+	+	11
24	"	252,000	+	+	+	56

Public Health (Milk and Cream) Regulations, 1912 and 1917.

1. Milk; and Cream not sold as Preserved Cream.

	(a) Number of samples examined for the presence of a preservative.		(b) Number in which a preservative was reported to be present.	
Milk	...	52	...	None
Cream	...	4	...	1

Nature of preservative in each case in column (b), and action taken under the Regulations in regard to it.—

This sample contained .1 per cent. of Boric Acid, and the vendor was cautioned.

2. Cream sold as Preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct—

(1) Correct statements made	...	...	7
(ii) Statements incorrect	...	...	None
Total			7

(iii) Percentage of preservative found in each sample.		Percentage stated on statutory label.
Boric Acid	...	.34
"	...	.26
"	...	.03
"	...	.03
"	...	.16
"	...	.29
"	...	.31

(b) Determinations made of milk fat in cream sold as preserved cream—

(i) Above 35 per cent.	...	...	7
(ii) Below 35 per cent.	...	...	None
Total			7

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) of the Regulations have not been observed.— None

(d) Particulars of each case in which the Regulations have not been complied with, and action taken— None.

3. Thickening substances. Any evidence of their addition in cream or to preserved cream. Action taken where found.

The Analyst makes no remark upon the question of thickening substances in his reports.

4. Other observations (if any).— None.

Meat.

As I have pointed out in previous reports, the Corporation have a commodious and well-equipped Slaughter-house, which was opened in 1893. The management is under the direction of the Medical Officer of Health, who is assisted by the Sanitary Inspector and his deputy, and a resident Superintendent at the Abattoir itself. As there is no so-called private slaughter-house in the City, all animals slaughtered in the City are dealt with at the Public Abattoir. Licences are granted in respect of three killing sheds, two of which, viz., the L.N.E. Railway, and the L.M. & S. Railway, are used exclusively for the slaughter of sheep and lambs for the Smithfield Market, and the third exclusively for the slaughter of pigs by Messrs. Cavaghan & Gray, Harraby.

Inspection of meat at the Public Slaughter-house is performed in the first instance by the Superintendent, who retains all unsound, diseased, or suspected meat for further examination by the Medical Officer of Health or other authorised officer of the Local Authority acting under him. Meat stalls are not permitted in the City, other than those situate inside the Public Market, a large covered market owned by the Local Authority. All other shops from which meat is sold are regularly inspected, and without exception every butcher's shop in the City is fitted with a window or windows which can be regulated so as to ensure protection to meat.

Public Slaughter-houses.

The following Table gives particulars of Animals killed, Carcasses examined, and particulars of Carcasses unfit for human food:—

Animal	Total number of animals slaughtered and examined	Number of carcasses specially referred for examination	Number in which the whole carcass was unfit for human food	Number in which a portion of a carcass was unfit for human food	Number in which edible offal only was unfit	Number affected with Tuberculosis.	
						Whole carcass condemned	Part of carcass condemned
Oxen	4,478	113	80	25	8	60	17
Sheep	14,889	39	38	1	...	...	...
Calves	285	4	4	...	...	1	...
Pigs	4,712	118	9	2	107	4	2
Totals	24,364	274	131	28	115	65	19

Other Foods.

Information concerning unsound food, food inspection, bakehouses, &c., and the work under the Sale of Food and Drugs Acts will be found on pages 73—78.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

Infectious Diseases Generally.

During the year 1235 notifications of infectious disease were received, 71 of which related to various forms of tuberculosis, and 1164 to other infectious diseases.

The number of deaths certified as due to the seven principal zymotic diseases was 64, equal to a zymotic death-rate of 1.1 per 1,000 of the population. In the previous year 42 deaths were certified as due to zymotic diseases.

Table showing the Age Groups and Wards in which cases of Infectious Diseases were notified during 1926.

	Number of Cases Notified at various Ages.						Number of Cases notified in each Ward.									Total number of cases notified	Number of cases in- correctly notified	Nett number of cases notified	Number of cases removed to hospital		
	Under 1 year	1—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65 and up- wards	Stannix and Enderby	Rickerfate	Aglionby	Greystone	St. Nicholas	Currock	Lenton Holme	St. Cuthbert's					Coldewgate	Newtown & Belle Vue
Scarlet Fever	1	42	137	45	12	3	...	16	12	26	28	53	26	16	15	22	240	4	236	129	
Diphtheria	...	15	33	2	1	...	...	...	5	6	5	7	6	4	4	4	56	11	45	35
Puerperal Fever	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	5	...	5	1
Erysip-las	1	...	...	5	7	11	6	1	3	1	1	6	6	4	...	5	30	...	30	3
Malaria	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...
Acute Primary Pneumonia	2	10	4	5	4	5	4	1	2	3	3	3	4	4	7	5	34	...	34	...	
Acute Influenzal Pneumonia	...	1	1	1	3	2	...	1	1	...	...	3	1	...	1	1	8	...	8	...
Encephalitis Lethargica	...	...	...	...	1	...	...	...	1	...	...	1	2	1	3	1	10	...	10	...
Ophthalmia Neonatorum	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Para-Typhoid Fever	...	695	...	...	...	...	...	59	51	81	84	85	48	72	161	75	774	2	772	...
Measles	79	...	...	15	25	5	1	1	3	6	9	5	8	7	9	1	55	...	55	...
Pulmonary Tub-rculosis	...	5	8	...	2	1	...	...	...	...	6	2	2	1	1	4	16	...	16	...
Other forms of Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Dysentery	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	3	...	3	...
Puerperal Pyrexia	...	...	...	...	3	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...

Scarlet Fever.

240 cases of Scarlet Fever were notified, as compared with 369 in 1925. There was no evidence of any particular local spread of infection.

129 of the patients, or 53.7 per cent., were removed to the Isolation Hospital.

4 deaths of residents were registered as being due to Scarlet Fever.

1 patient notified as suffering from Diphtheria was found not to be suffering from the disease, but from Scarlet Fever.

Six return cases occurred.

No experimental work in connection with ascertainment of susceptibles or work in respect of immunisation has been undertaken.

Table showing notifications, cases isolated, and number of deaths from scarlet fever during the years 1922-1926.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	Average period in Hospital (days).	No. of return cases.	No. of deaths.	Deaths per 100 cases.
19	104	65	40.5	2	1	0.
192	150	82	41.7	0	1	0.
192	245	171	35.9	9	4	1.6
1925	369	190	37	10	4	1.0
1926	240	129	38.6	6	4	1.6

Diphtheria.

The number of cases of diphtheria notified was 56, compared with 19 in 1925.

In 11 instances the patient was subsequently found not to be suffering from diphtheria.

10 deaths of residents of the City occurred, and the death-rate for this disease was 0.17 per 1,000 of the estimated population at all ages.

35, or 62.5 per cent., of the cases notified were removed to the Isolation Hospital.

No return case of diphtheria occurred.

No experimental work in connection with ascertainment of susceptibles or work in respect of immunisation has been undertaken.

Table showing notifications, cases isolated, and number of deaths from diphtheria during the years 1922-1926.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Deaths per 100 cases.
1922	64	48	2	3.1
1923	87	46	10	11.5
1924	68	46	9	13.2
1925	19	7	2	10.5
1926	56	35	10	17.8

Anti-Diphtheria Serum.

41 applications were made by medical practitioners for the free supply of anti-diphtheria serum, 290,000 units having been supplied.

Table showing case mortality of Scarlet Fever and Diphtheria isolated in Hospital compared with that of Home Cases.

Year.	SCARLET FEVER.				DIPHTHERIA.			
	Hospital Cases.		Home Cases.		Hospital Cases.		Home Cases.	
	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100
1922	65	1.5	39	0.0	48	4.1	16	0.0
1923	82	0.0	68	1.4	46	6.5	41	17.0
1924	171	1.7	74	1.3	46	13.0	22	13.6
1925	190	0.0	179	2.2	7	0.0	12	16.6
1926	129	2.3	111	0.9	35	17.1	21	19.0

Smallpox.

The City was again free from smallpox during the year. Notifications were received from Port Sanitary

Authorities in respect of 5 families who had arrived in this country in a ship on which smallpox had occurred, and who were proceeding to Carlisle.

On the 12th April, I received information from the Public Health Department at Gateshead-on-Tyne, that a boy aged 14, who had been staying in Carlisle, had been removed to hospital suffering from smallpox, immediately on his return to Gateshead. This boy during the later incubation period of the disease, whilst staying with friends here, had been in close contact with several families, amongst whom were unvaccinated children. All but two of the contacts were at once re-vaccinated after my interview with them, and fortunately none exhibited any evidence of smallpox.

On the 1st October I received a telegram from the Medical Officer of Health of Willesden that a resident of Carlisle had been in contact with cases of smallpox there, in a most infective stage, one of whom subsequently died. This contact, a young male adult, submitted himself to re-vaccination, and no evidence of smallpox was observed.

All contacts were kept under observation for about 20 days.

No vaccinations were undertaken during the year under the Public Health (Smallpox Prevention) Regulations, 1917.

Enteric Fever.

Para-Typhoid Fever.

Typhus or Continued Fever.

} No notifications relating
to these diseases were re-
ceived during the year.

Table showing the average number of cases notified as enteric fever for 5-year periods, 1890—1924, and for the 2 years 1925-1926.

Years.	Average for periods of 5 years.	Year.	Number of cases notified.
1890-1894	21.2	1925	...
1895-1899	18.6	1926	...
1900-1904	12.6	...	...
1905-1909	3.2	...	...
1910-1914	3.8	...	...
1915-1919	1.4	...	...
1920-1924	2.2	...	...

Malaria.

2 notifications relating to patients suffering from malaria were received. In each instance the patient had been abroad on active service, and had been infected whilst abroad.

No case of malaria of indigenous origin has ever come to the notice of the Local Authority.

Dysentery.

1 case of dysentery was notified.

Pneumonia.

42 notifications of pneumonia were received during the year. In 8 instances the disease was stated to be of the acute influenzal type, and in 34 instances of the acute primary type.

All were investigated by the Health Visitors, and, were segregated at home, advice being given as to the nursing and prevention of infection to others. 67 visits by the Health Visitors were made in this connection.

In no instance was the patient removed to Hospital.

Death took place in 1 instance of the cases notified as influenzal pneumonia, and in 14 instances of those notified as primary pneumonia.

Influenza.

7 deaths of residents were registered as due to influenza, as against 21 in 1925.

The age distribution of the deaths occurring among the 7 persons was as follows:—

0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and up- wards	Total
...	2	1	...	1	1	1	1	7

Encephalitis Lethargica.

1 case of encephalitis lethargica was notified. A post-mortem examination, however, showed the condition to be one of meningococcal meningitis.

Cerebro-Spinal Fever.

No case of cerebro-spinal fever was notified.

Tetanus.

No case of tetanus was notified.

Other Infectious Diseases.

Information relating to puerperal fever, ophthalmia neonatorum, measles, whooping cough, chicken-pox, and mumps, are given on pages 64—66.

Notification Fees.

The total amount paid in fees for notifications of all notifiable diseases during 1926 was £55 3s. 9d.

TUBERCULOSIS.

No change of importance has been made in the Authority's scheme during the year; the Friday afternoon clinic has, however, been discontinued, and all adult cases are now seen at the Tuesday afternoon clinic, and the clinics for Tuberculin treatment, previously arranged fortnightly on Tuesday mornings, are now arranged at intervals of ten days, on Tuesday and Friday mornings. These changes were made primarily with a view to giving the Tuberculosis Officer additional time for home visiting and other work in connection with the Dispensary.

Since the date of the issue of Memo. 37/T. by the Ministry of Health in regard to Statistical Returns, a complete revision of the registers has been in progress, and has now been completed, and the differences shown in some of the figures are more attributable to this revision than to any great change in the local conditions. It is to be noted that 48 cases were written off the Dispensary Register as cured; for 1925 this figure was 17. Some of

these cases should have been written off earlier, whilst others could have been written off earlier had the patients presented themselves for examination. 80 cases in which the diagnosis had not been confirmed were dealt with, in accordance with the instruction that doubtful cases which had not at the end of two months shown definite signs of tuberculosis should be considered as not tubercular. In this connection the number so dealt with in 1925 was 111. A number of the cases recorded as "diagnosis not completed" might also have been written off, but these are attending the Open-air School under supervision and, while not presenting any definite clinical signs of tuberculosis, are in fact probably suffering from the effects of tuberculisisation.

With regard to the Notification Register, the number of cases at the beginning of the year was 778, and at the end of the year was as follows:—

Pulmonary	...	Male, 157; Female, 156; Total 313
Non-Pulmonary	...	Male, 43; Female, 45; Total 38

All cases, 401

The number of notifications of tuberculosis received during the year was 77, as compared with 113 in 1925, the decrease being chiefly in respect of notification on Form A, *i.e.*, notifications by medical practitioners, which were 67 as against 95, and most marked in the age groups over 35 years, where the figures have fallen from 40 to 19. With regard to Form B., the decrease is marked in the age group 5—10 years, and in all cases the diminution is in respect of pulmonary tuberculosis, the figures being 60 as against 95. Six of the total notifications received were duplicates, and of the net primary notifications 61 were by medical practitioners and 10 by the Assistant School Medical Officers or Tuberculosis Officer. The number of cases of tuberculosis brought to the notice of the Medical Officer of Health otherwise than by notification was 19, as compared with 15 in the previous year.

The death-rate from all forms of tuberculosis is slightly higher, the increase being in respect of non-pulmonary tuberculosis, in which the number of deaths

was 15, as compared with 7 in 1925. 22.2 per cent. of the total deaths were in respect of cases concerning which no notification whatever had been received; in addition, 3.2 per cent. had died before receipt of notification. A further 8 per cent. died within a week of notification, so that in exactly one-third of the total deaths from tuberculosis the Local Authority had no opportunity to take any action. In view of the chronic nature of the vast majority of cases of pulmonary tuberculosis, the fact that only 50 per cent. of those persons dying survived more than three months after notification indicates what has been previously mentioned in these reports, viz:—Failure to notify until the patient has arrived at a very late stage of the disease.

The following table shows the relationship between the deaths from Tuberculosis and notifications for the past 10 years.

Year	Deaths		Notifications	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
1917	72	24	103	30
1918	48	19	109	28
1919	46	16	102	25
1920	36	15	111	24
1921	46	22	106	36
1922	50	14	91	14
1923	40	14	71	16
1924	49	20	104	20
1925	49	7	88	15
1926	48	15	55	16

With regard to the work of the Tuberculosis Dispensary, 130 new cases and 18 others, who were either transferred from another area or were re-discovered after having been lost sight of, were examined during the year. 85 were notified cases or cases suspected to be suffering from tuberculosis, and 45 were contacts. 54 of the 85 notified cases were found to be definitely tuberculous, 21 were classified as doubtful, and 10 were not suffering from tuberculosis. Of the 45 contacts, 5 were doubtful, and the remainder free from any evidence of active tuberculosis.

Of the 54 cases definitely tuberculous, 42 were suffering from pulmonary tuberculosis and 12 from other forms of the disease; 40 were adult cases, and 14 were children.

The number of persons on the Dispensary Register at the beginning of the year was 364, and of these 166 presented themselves for re-examination, so that the total number of persons under supervision during the year was 314. The total number of attendances at the Dispensary was 1326, of which number 270 were by insured persons, 63 by discharged soldiers, 864 by children of school age, and 129 by other categories, while 136 home visits were made by the Tuberculosis Officer.

Special treatment by means of Tuberculin (B.E.) was given to 41 children of school age, the total number of injections being 549.

The Tuberculosis Clinic was open on 177 occasions, the average number of persons attending per session being 7.5.

The Nurses visited the homes of all patients on the Tuberculosis Dispensary Register, and also all new cases notified to the Medical Officer of Health during the year.

The number of persons on the Dispensary Register at the end of the year was 334, in 48 instances the diagnosis being incomplete. Of the cases definitely diagnosed as tuberculosis 237 are pulmonary and 49 non-pulmonary.

90 specimens of sputum were examined, in 30 of which the tubercle bacillus was present.

Cod Liver Oil and Malt, and Virol were supplied in 34 instances, sputum flasks in 7 instances, and thermometers in 2 instances.

The average duration of residential treatment at the Sanatorium was 112 days.

Residential Institutions.

A—AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS DURING THE YEAR 1926.

	Observation	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis		Total
		"Sanatorium" Beds	"Hospital" Beds	Disease of Bones and Joints	Other Conditions	
Adult Males	*	} 20
Adult Females	
Children under 15	
Total	

* The Local Authority have a call upon 20 beds at the Blencathra Sanatorium, but there is no fixed agreement as to the number which shall be available for either sex, or for any fixed ages, or class of case, although this Institution strictly does not provide accommodation for what are called advanced cases.

B—EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1926.

	In Institutions on Jan. 1.	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
Number of Patients ...	M. 8	23	25	1	F. 5
	F. 6	13	18	...	1
	M. 2	1	2	...	1
	F. 2	7	3	..	6
Number of Observation Cases ...	M. ...	...	...	..	...
	F. ...	...	..	..	...
	M. ..	...	...	...	...
	F. ...	...	...	...	...
Total ...	18	44	48	1	13

Work of the Dispensary.

Diagnosis	Pulmonary				Non-Pulmonary				Total			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A—New Cases examined during the year (excluding contacts) :—												
(a) Definitely tuberculous ...	22	14	1	5	1	3	4	4	23	17	5	9
(b) Doubtfully tuberculous ...	2	6	3	8	...	...	...	2	2	6	3	10
(c) Non-tuberculous ...	..	3	3	4	...	..	...	...	...	3	3	4
B—Contacts examined during the year :—												
(a) Definitely tuberculous ...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Doubtfully tuberculous ..	2	1	1	1	...	...	...	...	2	1	1	1
(c) Non-tuberculous ...	5	9	11	15	...	..	...	...	5	9	11	15
C—Cases written off the Dispensary Register as												
(a) Cured	12	14	9	9	...	2	...	2	12	16	9	11
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ...	6	13	32	29	...	.	...	..	6	13	32	29
D—Number of Persons on Dispensary Register on December 31st :—												
(a) Diagnosis completed ...	72	76	45	44	4	10	17	18	76	86	62	62
(b) Diagnosis not completed ...	3	7	16	20	...	...	...	2	3	7	16	22

Summary of Notifications of Tuberculosis from 3rd January, 1926, to 1st January, 1927. NOTIFICATIONS ON FORM A.

		Number of Primary Notifications.													Total Prim- ary Noti- fications on Form A.
		Ages.													
		0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & up- wards.	Total Prim- ary Noti- fications.	Total Noti- fications on Form A.	
Pulmonary	Males	...	...	1	1	...	5	1	11	3	2	1	25	28
	Females	...	...	1	2	5	5	12	1	...	...	...	26	28
Non-pulmonary	Males	...	2	1	...	...	...	...	...	1	...	...	4	4
	Females	...	3	1	...	...	...	2	...	...	...	...	6	7
Totals		...	5	4	3	5	10	15	12	4	2	1	61	67	

NOTIFICATIONS ON FORM B.

		Number of Primary Notifications.					Total Noti- fications on Form B.
		Ages.	0-5	5-10	10-15	Total.	
Pulmonary	Males	...	...	1	...	1	1
	Females	...	...	3	...	3	3
Non-pulmonary	Males	...	...	2	...	2	2
	Females	...	...	3	...	4	4
Totals		...	5	5	10	10	10

NOTIFICATIONS ON FORM C.

		Poor Law Institutions.		Sanatoria.	
Pulmonary	Non-pulmonary	Males	Females	Males	Females
	
3	1	...	...	26	22
...	...	...	...	...	1
4	...	...	...	49	...

Supplemental Return.

New cases of tuberculosis coming to the knowledge of the Medical Officer of Health otherwise than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912.

Ages.	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 and up-wards.	Total Cases
Pulmonary—												
Males .. .. .	...	...	..	..	...	2	...	1	1	..	1	5
Females .....	...	...	...	...	...	...	2	...	...	...	...	2
Non-pulmonary												
Males .....	...	1	...	...	1	...	1	...	1	1	...	5
Females	1	2	2	...	1	..	...	...	...	...	1	7
Totals... .. .	1	3	2	...	2	2	3	1	2	1	2	1

The total number of deaths of City residents registered from all forms of tuberculosis was 63, equal to a death-rate of 1.1 per 1,000 of the population at all ages. Of this number, 48 (76.1 per cent.) were due to pulmonary tuberculosis, equal to a death-rate of 0.8 per 1,000 of the estimated population at all ages.

Distribution of the Deaths from Tuberculosis in the various Wards of the City, 1926.

	Stauwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldegate	Newtown & Belle Vue	Carlisle
Pulmonary ...	5	1	3	8	1	7	7	6	6	4	48
Non-pulmonary ...	...	2	2	3	1	2	...	2	3	...	15
Totals	5	3	5	11	2	9	7	8	9	4	63

Age and Sex distribution of New Cases and Deaths from Tuberculosis, 1926.

Ages.	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 and over.
New Cases.											
Pulmonary—											
Male	2	1	...	5	1	11	3	2	1
Female	4	2	5	5	12	1	..	...	...
Non-Pulmonary—											
Male	...	2	1	2	...	...	...	...	1	..	...
Female	...	3	2	3	...	...	2	...	...	...	..
Deaths.											
Pulmonary—											
Male	1	1	1	4	9	9	2	1
Female	1	1	1	6	7	3	1	...	...
Non-Pulmonary—											
Male	...	2	...	...	1	..	1	...	1	1	...
Female	...	1	3	3	...	...	1	...	...	...	1

Table showing the period persons dying in 1926 survived after notification.

	Not Notified	Died before Notification	Died within 7 days	Survived more than									
				1 week	1 month	3 months	6 months	9 months	1 year	1½ years	2 years	3 years	4 years
Pulmonary ...	4	1	2	41	39	30	24	23	20	16	9	8	4
Non-Pulmonary	10	1	3	1	1	1	...	...	...	...	...	...	...

Deaths from Tuberculosis, Influenza, and other Respiratory Diseases, 1922-1926.

Year.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Tuberculosis, all forms.	Influenza.	Other Respiratory diseases.
1922	50	14	64	55	136
1923	40	14	54	7	89
1924	49	20	69	23	115
1925	49	7	56	21	100
1926	48	15	63	7	92

VENEREAL DISEASES.

During the year 176 persons residing in Carlisle, 122 of whom were males and 54 females, were under treatment or observation at the Clinic at the Cumberland Infirmary. This is a decrease of 20 persons upon the figure for 1925.

79 new patients attended for the first time, as compared with 97 for 1925.

73 patients were found to be suffering from syphilis, 2 from non-syphilitic chancre, 84 from gonorrhœa, and 17 from conditions other than venereal disease.

1663 attendances were made by these patients, an increase of 240 on the figure for the previous year. In addition, 827 attendances were made by patients for intermediate treatment by irrigation. 419 doses of arsenobenzol compounds were administered to patients.

5 medical practitioners in the area are entitled to receive free supplies of arsenobenzol compounds, to whom these have been supplied for the treatment of 6 cases.

With regard to the examination of pathological material, in addition to the figures in the following table 36 specimens for Wassermann re-action were sent on behalf of medical practitioners to the Public Health Laboratory, Manchester.

No action has been taken in the area under the Venereal Diseases Act, 1917.

Clinics.

Clinics were held on the same days and at the same hours as in the previous year, viz.:—for women and children on Mondays at 2-30 p.m. and Thursdays at 5-30 p.m. The male clinics for syphilis were held on Wednesdays at 2-30 p.m. and Thursdays at 6 p.m., and the male clinics for gonorrhœa on Wednesdays at 6 p.m.

New cases were seen at any of the clinics.

Return relating to all persons resident in the City of Carlisle who were treated at the Treatment Centre at the Cumberland Infirmary during the year ended 31st December, 1926.

	Syphilis.		Soft Chancere.		Gonorrhoea.		Conditions other than Venereal.		Total.	
	M	F	M	F	M	F	M	F	M	F
1. Number of cases which— (a) at the beginning of the year under report were under treatment or observation for (b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection	23	14	...	1	30	11	...	...	58	26
Total—Items 1 (a) and 1 (b)	30	15	...	1	37	11	...	...	67	27
2. (a) Number of cases dealt with at the Treatment Centre during the year for the first time	18	10	1	...	29	7	7	10	55	27
Total—Items 1 (a), 1 (b), and 2 (a)	48	25	1	1	66	18	7	10	122	54
(b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection	2	...	...	...	...	1	...	...	2	1
3. Number of cases which ceased to attend— (a) before completing the first course of treatment for (b) after one or more courses, but before completion of treatment for	3	3	...	1	17	4	...	...	20	8
(c) after completion of treatment, but before final tests as to cure of	9	4	...	...	...	...	...	...	9	4
4. Number of cases transferred to other Treatment Centres after treatment for	3	3	...	...	2	1	...	...	5	4
5. Number of cases discharged after completion of treatment and observation for	1	2	1	...	10	1	...	...	12	3
6. Number of cases which, at the end of the year under report, were under treatment or observation for	29	13	...	...	32	11	...	...	61	24
Total—Items 3, 4, 5 & 6	48	25	1	1	66	18	...	...	115	44
7. Out-Patient attendances— (a) For individual attention by the Medical Officer (b) For intermediate treatment. <i>e.g.</i> , irrigation, dressings, etc.	574	270	2	...	602	188	12	15	1190	473
	...	...	3	...	824	...	...	...	827	...

Examinations of Pathological Material :—

	For Spirochaetes.	Detection of Gonococci.	Other Organisms.	For Wassermann Re-action.
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre...	...	30	3	...
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory ...	2	2	...	159

With regard to the joint scheme of the County Council and the City, during the year a total of 245 persons were treated at the treatment centre at the Cumberland Infirmary, Carlisle, of whom 124 were seen for the first time, the remainder being carried over from the previous year. 25 of these were found not to be suffering from venereal disease, leaving 220. The figure for 1925 was 238.

In the number of new cases of syphilis (40) there was a decrease of 1, and a decrease of 7 in the new cases of gonorrhœa (56).

Areas in which Patients resided.	New Patients.	Total Attendances.
Carlisle	82	2,490
Cumberland	29	415
Westmorland	3	25
Dumfriesshire	6	164
London	1	1
Burnley	1	31
Roxburgh	—	9
Manchester	1	1
Sunderland	1	5
	<hr/> 124 <hr/>	<hr/> 3,141 <hr/>

MATERNITY AND CHILD WELFARE.

1,218 notifications of birth were received during the year, 1,171 of which related to live births and 47 to still-births. 635 were notified by medical practitioners, 561 by midwives, and 2 were notified through other agencies. In 20 instances only did failure to notify occur.

Health Visitors.

The following summary of the visits paid by the Corporation Health Visitors is much greater than during 1925, the number of visits to homes being increased by 1,018, and the number of visits to children by 1,349.

Total number of homes visited	...	...	12,602
Primary visits in connection with the notification of births	...	...	1,202
Re-visits in connection with the notification of births:—			
0—1 year	...	...	4,284
1—2 years	...	...	3,186
2—3 years	...	...	3,209
3—4 years	...	...	2,935
4—5 years	...	...	2,391
		—	16,005
Total number of routine visits to children	...		17,207
Visits to children nursed or maintained by persons other than the parents	...		72
Visits to expectant mothers—			
Primary	...	...	201
Re-visits	...	...	256
		—	457
Visits in connection with—			
Deaths of children under 1 year	...	...	80
Ophthalmia Neonatorum	...	...	32
Diarrhœa	...	...	86
Bronchitis	...	...	113
Broncho-pneumonia	...	...	38
Acute Lobar and Influenzal Pneumonia...			67
Measles	...	...	1,694
Whooping Cough	...	...	518
Chicken-pox	...	...	216
Mumps	...	...	15
Spina Bifida	...	...	7
Pemphigus Neonatorum	...	...	5
Puerperal Fever	...	...	1

Inspection of Midwives.

During January, 19 certified midwives gave notice of intention to practice, and on various dates during the year 8 others notified their intention to practice, making a total of 27. 4 midwives left the City, and 1 gave up practice, leaving at the end of the year 22 midwives on the register.

These midwives attended a total of 480 confinements.

No case of puerperal fever occurred in the practice of a midwife.

Notices, in accordance with the rules of the Central Midwives' Board, were received in connection with the following conditions:—

Cases in which a midwife called for the assistance of a medical practitioner	...	...	122
Notification of the intention to substitute artificial for breast feeding	...	...	27
Notification of still-births	...	...	6
Notification of having laid out a dead body	...	...	4
Notification of death before a doctor's arrival	...	...	3
Notification of liability to be a source of infection	...	...	1

The circumstances in which medical help was either obtained or advised are given as follows:—

Condition of Mother—

Ante-natal	...	...	...	7
Hæmorrhage	...	...	5	
Varicose Veins	...	...	2	
During Labour	...	...	...	46
Delayed Labour	...	...	20	
Malpresentation	...	...	4	
Miscellaneous	...	...	22	
Post-natal	...	...	...	35
Hæmorrhage	...	...	4	
Ruptured Perinæum	...	...	28	
Others	...	...	3	
Condition of Child	...	...	...	34
Prematurity	...	...	8	
Inflammation of the Eyes	...	...	13	
Others	...	...	13	

The following conditions are given as the reasons for the substitution of artificial feeding:—

By doctor's orders, on account of—

Debility of mother	...	...	...	4
Mother's milk insufficient	...	...	...	9
Condition of breasts or nipples	...	...	...	2
No definite reason	...	...	...	1
				—
				16
				—

By midwives, on account of—

Insufficient milk	...	...	...	4
Debility of mother	...	...	...	2
Disinclination of mother	...	...	...	4
Infant nursed out	...	...	...	1
				—
				11
				—

64 visits, viz., 32 routine and 32 special, were made to midwives for the purpose of supervision at their own homes, and their bags, outfits, and registers have been regularly inspected.

Letters relating to the following matters in connection with the rules of the Central Midwives' Board were written to midwives, viz.:—

Failure to notify a birth	...	...	...	2
Failure to notify sending for medical help	...	...	...	2
Inaccurate entries in form calling for medical help	...	...	...	4
Incomplete entries in the midwife's register	...	...	...	5
Failure to notify the substitution of artificial feeding	...	...	...	1
Failure to forward register	...	...	...	1
<i>Re</i> Meeting concerning Rules of Central Midwives' Board	...	...	...	22
Accompanying leaflets <i>re</i> Pemphigus Neonatorum	...	...	...	21
Others	...	...	...	4

Home Nursing.

Under the arrangement with the Carlisle District Nursing Association the following conditions were attended to by their nurses:—

	No. of Cases.	No. of Visits.
Measles ...	2	27
Pemphigus ...	1	7
Ophthalmia ...	1	35
Whooping Cough ...	1	4
		<hr/> 73 <hr/>

Corporation Maternity Home.

172 patients received treatment in this institution, 9 of whom were admitted upon the request of medical practitioners.

1 maternal death occurred, which was due to eclampsia.

The following particulars relate to the work of the Maternity Home:—

In hospital on 31st December, 1925 ...	2
Admitted during year ...	170
	<hr/> 172 <hr/>

Average duration of stay ...	11.9 days
Number of cases delivered by midwives...	154
Number of cases delivered by a doctor ...	12
Total number of confinements ...	166
Number of cases treated ante-natally only ...	3
Number of cases treated during puerperium only	2
Abortion ...	1

Number of cases in which medical assistance was specially indicated:—

Mothers—

Before Labour	16
Albuminuria	2
Malpresentation	9
Pelvic Contraction	1
Heart Disease	3
Eclampsia	1
During Labour	15
Delayed Labour	7
Placenta Prævia	1
Hydrocephalus	1
Malpresentation	4
Accidental Hæmorrhage ..	2
After Labour	30
Rupture of Perineum... ..	23
Raised Temperature	1
Cardiac Disease	2
Threatened Eclampsia	1
Albuminuria	1
Post-Partum Hæmorrhage ...	1
Mastitis	1
For Infant	14
Malformation	2
Feebleness	3
Artificial Feeding	6
Slight Inflammation of Eyes ...	3
Number of Maternal Deaths ...	1
Still-births	10
Causes—	
Accidental Hæmorrhage	1
Placenta Prævia	1
Hydrocephalus	1
Malpresentation	3
Maternal Condition—Albuminuria	1
Heart Disease	1
Old Phthisis	1
No cause ascertained	1
Died before 10 days	4

Causes—

Prematurity	...	...	2
Hydrocephalus	...	...	1
Eclampsia	...	...	1
Total number of Fœtal Deaths	...	...	14
Conditions necessitating the substitution of artificial feeding for breast feeding	...	...	4
Insufficient milk	...	...	1
Mastitis	...	...	1
Anæmia	...	...	1
Ante-Partum Hæmorrhage	...	...	1

Ante-Natal Clinic.

The number of attendances by expectant mothers was 584, or 113 more than last year. Of these, 186, 20 more than last year, were first visits of new patients.

Among the conditions in which medical attention or advice was given were the following:—Heart disease, bronchitis, rheumatism, anæmia, hyperemesis, dyspepsia, albuminuria, varicose veins, mastitis, uterine prolapse, pelvic contraction, malpresentation, hæmorrhage, hæmorrhoids, constipation, œdema, and old dislocation of the hip.

Infant Consultations.

At the clinics for children up to five years of age there were 736 attendances, or 33 more than in 1925, of which 264, or 58 more than last year, were attendances by new cases, and treatment or advice was given in the following conditions:—Malnutrition, injudicious feeding, prematurity, debility, marasmus, diarrhœa, dyspepsia, constipation, teething, worms, hernia, rickets, bronchitis, suspected phthisis, anæmia, eczema, impetigo, ringworm, seborrhœa, burns, squint, conjunctivitis, hordeolum, ophthalmia, nævus, otorrhœa, enlarged tonsils, parotitis, phimosis, tongue-tie, cleft palate, stomatitis, fits, adenitis, pertussis, laryngeal spasm, congenital syphilis, cephalhæmatoma, brachial palsy, and minor injuries.

Voluntary Agency.

BABIES' WELCOMES AND SCHOOLS FOR MOTHERS.

The co-operation with the voluntary centres continues as in former years, the Assistant Medical Officer paying a visit to one of the centres in each week. At this visit, after seeing as many individual children as may require attention, the Medical Officer gives a short informal talk, or asks the mothers themselves to suggest some subject on which they desire information, or encourages them to engage in discussion among themselves. There has been a gratifying increase in the number of first attendances of both mothers and babies, and also in the number of attendances of babies under one year of age.

The following is a general summary of the work of the centres:—

Number of sessions held	...	...	...	168
Attendances of children—				
First attendances	...	...	162	
Subsequent attendances	...	...	4,272	
			<hr/>	
Aged 0—1 year	...	...	1,484	
Aged 1—5 years	...	...	2,950	
		Total	—	4,434
Attendances of mothers—				
First attendances	...	...	136	
Subsequent attendances	...	...	3,566	
		Total	—	3,702
Classes and addresses—				
Mothercraft	...	...	96	
Hygiene	...	...	46	
Cooking	...	...	3	
		Total	—	145

HEALTH VISITOR.

Total number of homes visited	...	...	4,468
Primary visits to children	...	...	334
Re-visits—			
0—1 year	...	...	1,738
1—2 years	...	...	1,075

2—3 years	...	...	...	1,024	
3—4 years	...	...	...	857	
4—5 years	...	...	...	1,029	
				—	5,723
Total number of visits to children	...	...	...	6,057	
Visits to expectant mothers—					
Primary	...	...	...	4	
Re-visits	...	...	...	158	
Number of attendances at Babies' Welcomes	...	...	...	127	

Free Provision of Milk.

During the year 2,710 gallons of milk were supplied free of cost to 220 families for the purpose principally of assisting the feeding of infants, and in a few instances to nursing mothers.

Previous to supplying the milk, careful investigation of the circumstances was made in each instance.

Still-Births.

The number of still-births notified during the year was 48, or 3 less than in 1925. Of this number, 5 were notified by midwives, concerning which the following particulars are available:—3 were full-time and 2 premature; in the case of the 3 full-time still-births no cause could be ascertained, and of the two premature still-births, in 1 case the mother suffered from albuminuria, and in the other no cause except prematurity was given. In 13 instances the cause of the still-birth was unascertainable; in 6 cases the delivery was instrumental, in 6 there was a malpresentation, and in 4 cases each the mother suffered from hæmorrhage or eclampsia, and in 2 cases from albuminuria. In 5 cases the child was very premature. In 2 cases the history of a fall or other strain was given, in 2 cases the children were twins, and in 1 case the mother's pelvis was contracted. There were also 2 monsters.

The bodies of 40 still-born children were given burial in the Carlisle Cemeteries.

1 only of the still-births was illegitimate.

Table showing certain particulars regarding the 48 still-births.

	Total.	Legitimate.	Illegitimate.	Male.	Female.	Full Time.	8 Months.	7 Months or less.
Maternal Conditions—								
Albuminuria	2	2	...	2	..	1	1	...
Ante-Partum Hæmorrhage...	4	4	...	2	2	2	1	1
Strain or Accident	2	2	...	...	2	1	1	...
Eclampsia	4	4	...	3	1	1	3	...
Pelvic Contraction	1	1	...	1	...	1	...	..
Instrumental Delivery	6	6	..	3	3	6	...	..
Malpresentation	6	5	1	2	4	6	..	...
Hydrocephalus	1	1	...	...	1	1	...	...
Anencephalus	1	1	...	..	1	1	...	...
Twins	2	2	..	1	1	1	1	...
Marked Prematurity	5	5	..	3	2	...	...	5
Father a Plumber	1	1	...	..	1	1	...	...
No cause ascertained	13	13	...	9	4	11	1	1

Infant Mortality.

The total number of deaths of infants under one year was 96; the number of deaths of residents was 95, which provides a net infant mortality rate of 81.9 per 1,000 of the registered births. If the figures are corrected by adopting the method suggested by the Registrar General, viz., taking as the denominator the sum of 70 per cent. of the current year's births, and 30 per cent. of the births of the previous year, the infant mortality rate for 1926 is 84.4 per 1,000 births registered. This would show a slightly higher infant mortality rate than that for 1925, which was the lowest ever experienced.

The death-rate due to diarrhœa amongst infants up to one year was 10.4 per 1,000 registered births, as compared with 6.7 per 1,000 registered births in 1925, and is a rather higher rate than has prevailed for the past 4 years. None of the deaths occurred in July and August, so that the diarrhœa probably in most

instances occurred as a terminal or inter-current affection, together with some other condition, rather than as the usual infective and epidemic type.

The number of deaths caused by prematurity, congenital defects, debility, and marasmus was 47, approximately the same percentage as in 1925 from the same defects.

Of the total infant deaths, 45, or very nearly one-half, occurred before the child was one month old. In the whole of England and Wales in 1925, the deaths occurring under one month comprised less than one-third of the total number of infant deaths; in Carlisle, therefore, these deaths in very early infancy appear to occupy a greater proportion of the total infant mortality. If such deaths could be reduced it would effect a greater improvement in the infant mortality, which even now compares favourably with that of county boroughs as a whole. No less than 20 infant deaths occurred before the child was a day old, nearly all of which were from prematurity, and before the tenth day 14 further deaths occurred, or more than one-third of the total number of infant deaths. The number of deaths from bronchitis and pneumonia was 15, the rate per 1,000 being 12.9, compared with 15.3, as in 1925.

There was an increase in the number of deaths from zymotic diseases; 5 being caused by whooping cough, as compared with 4 in 1925; and 6 by measles, as compared with none in 1925.

The number of deaths caused by diarrhœal diseases was 12, as compared with 7 in 1925. There was 1 death from tuberculosis, as compared with 2 in 1925; and none from meningitis, as compared with 2 in 1925.

The illegitimate death-rate is again low, being only two-thirds that of the legitimate death-rate, whereas the experience in the country as a whole is that the illegitimate death-rate is about twice as great as the legitimate death-rate. These figures are a satisfactory reflection of the care that is directed towards the welfare of nurse children in the town.

Infant Mortality,

with deaths from stated causes, at various ages and in various seasons, of children under one year of age.

CAUSE OF DEATH.	AGE.							MONTH.												Total Deaths under One Year.		
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.		November.	December.
All Causes. } Certified ... } Uncertified ...	27 1	7 ...	6 ...	4 ...	44 1	15 1	15 1	3 1	14 ...	5	13	11 2	8	9 ...	11 ...	2 ..	8 ..	5 2	5 ..	5 ..	9 ...	91 4
Whooping Cough ...	..	..	..	..	..	4	..	..	1	..	..	1	1	1	..	..	..	..	..	1	1	5
Measles ...	..	..	..	..	..	..	..	1	4	..	3	1	1	..	..	..	..	..	..	..	..	6
Syphilis and other Venereal Diseases	..	..	..	1	1	..	1	..	..	..	1	1	..	..	..	..	1	..	1	..	..	2
Tuberculosis (all forms)	..	..	..	..	1	2	2	1	..	1	2	2	..	1	..	..	1	..	..	..	..	1
Bronchitis ...	..	..	1	..	..	1	3	..	5	1	3	1	2	..	4	..	..	..	..	..	..	6
Pneumonia (all forms)	..	..	..	..	..	1	5	..	3	..	1	2	..	..	..	..	..	..	..	..	9	
Enteritis and Gastro Enteritis	..	..	2	..	2	2	5	..	3	..	1	2	..	..	..	..	..	3	1	1	2	12
Convulsions	1	1	..	1	3	2	1	..	1	2	1	..	..	..	..	..	..	..	..	..	5	
Prematurity	18	1	2	1	22	2	1	..	1	..	1	2	2	3	4	1	3	3	2	1	1	24
Congenital Defects	2	2	..	..	4	2	1	..	..	..	1	1	1	1	1	1	1	1	1	1	7	
Other Defects of Early Infancy	6	2	..	..	8	1	1	..	..	1	1	1	1	2	2	..	2	..	1	1	9	
Atrophy, Debility & Marasmus	1	1	1	..	3	2	1	1	..	..	1	1	1	1	1	1	1	..	1	1	1	7
Acute Mastoiditis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Status Lymphaticus	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	28	7	6	4	45	16	16	4	14	5	13	13	8	9	11	2	8	7	5	5	9	95

Rates of Mortality among Infants at various ages, and from the principal causes, per 1,000 births.

Year	Nett Infant Mortality Rate.	AGES.					CAUSES.					
		Under 4 Weeks	4 Weeks and under 3 Months	3 Months and under 6 Months	6 Months and under 9 Months	9 Months and under 12 Months	Not Preventable.			Preventable.		
							Premature Birth	Atrophy, Debility & Marasmus	Congenital Malformations and Alectasis.	Diarrhea and Enteritis	Bronchitis and Pneumonia	Whooping Cough
1909	123.6	47.9	26.1	20.9	14.8	13.9	21.7	17.4	7.0	20.9	13.1	4.4
1910	109.1	41.9	19.1	21.0	15.7	11.4	28.8	13.1	5.2	12.2	14.8	4.4
1911	145.0	45.0	27.0	27.0	25.2	20.8	18.0	12.6	4.5	37.9	26.1	9.0
1912	102.4	42.0	15.8	16.6	17.5	10.5	15.8	15.8	9.6	9.6	21.9	6.1
1913	127.1	49.8	17.2	27.5	19.0	13.7	28.4	12.9	6.0	19.0	18.0	3.4
1914	122.4	48.0	25.6	21.5	15.7	11.6	19.8	15.7	5.6	20.7	18.2	5.8
1915	144.3	51.2	30.2	26.8	14.3	21.8	30.2	12.6	5.9	15.9	20.1	10.1
1916	101.5	47.1	13.6	16.3	15.4	9.1	27.2	7.3	8.1	17.2	14.5	0.0
1917	106.5	39.4	16.1	23.3	15.2	12.7	20.6	7.2	10.8	24.2	10.7	1.8
1918	126.8	38.7	17.4	26.1	30.0	14.5	22.3	10.6	4.8	14.5	25.2	19.4
1919	107.9	45.9	17.3	18.8	13.1	12.3	19.7	22.5	9.4	13.1	20.6	0.0
1920	80.0	30.2	13.4	19.3	10.5	7.0	16.1	11.9	9.1	8.6	13.3	3.5
1921	105.3	38.2	17.5	23.7	16.8	9.1	11.4	17.5	9.1	22.1	13.7	2.3
1922	81.2	35.5	11.0	14.2	7.9	12.6	17.4	8.7	6.3	5.5	15.8	2.4
1923	82.9	39.7	11.0	7.6	14.3	10.1	29.6	5.0	6.7	7.6	11.8	0.8
1924	95.0	30.5	23.3	10.7	18.8	11.7	17.0	9.9	6.3	5.4	26.9	3.6
1925	78.4	37.3	15.3	3.8	9.6	12.4	26.8	4.8	9.6	6.7	15.3	3.8
1926	81.9	38.8	13.8	13.8	3.4	12.1	20.7	6.0	13.8	10.4	12.9	4.3

Infant Mortality Rates for the various Wards, 1918-1926.

Year	Stanwix & Eterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Outhbert's	Caldewgate	Newtown & Belle Vue	Carlisle
1918	108.7	141.2	135.4	101.7	94.9	93.8	125.0	193.3	156.2	97.2	126.8
1919	81.6	97.8	123.3	83.9	125.0	65.4	160.6	119.0	115.1	65.8	107.9
1920	46.5	77.5	54.3	100.0	68.6	57.4	81.6	113.2	87.0	78.4	80.0
1921	23.8	150.7	91.7	174.6	86.9	62.0	105.2	62.5	158.4	56.8	105.3
1922	50.8	47.6	84.0	75.7	102.9	90.9	98.7	65.7	78.5	112.5	81.2
1923	163.2	79.6	64.0	82.6	77.5	44.9	73.0	64.1	141.0	107.6	82.9
1924	68.9	96.7	150.0	36.6	81.4	93.4	55.1	130.0	158.8	36.1	95.0
1925	85.1	70.1	66.6	90.9	78.2	37.3	101.5	59.3	97.0	92.7	78.4
1926	30.3	75.7	79.4	71.4	66.6	55.5	112.7	76.9	116.7	112.1	81.9

Infant Mortality in Relation to the Mode of Feeding.

The following table shows the deaths of infants under one year in relation to the mode of feeding:—

MODE OF FEEDING.	Number so Fed.		Number of Deaths.		Mortality Rate per 1,000 so fed.
	Legitimate.	Illegitimate.	Total.	Total.	
Breast	834	31	865	32	37.0
Partly Breast and partly Bottle	120	9	129	15	116.3
Bottle—					
(1) Boat-shaped	140	27	167	18	119.8
(2) Tube bottle	3	0	3	0	0.0
Debilitated Infants—					
(1) Spoon-fed	2	0	2	2	1,000.0
(2) Unable to be fed	22	2	24	24	1,000.0
No information re feeding	14	0	14	1	71.4

Death-rates per 1,000 among infants under 1 year, classified according to the Method of Feeding,
1917-1926.

Mode of Feeding.	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	15 years.		
											Total No. of Children.	Total No. of Deaths.	Average Mortality Rate.
Total infant mortality rate	106.5	126.8	107.9	80.0	105.3	81.2	82.9	95.0	78.4	81.9	17551	1800	102.5
Mortality rate for breast-fed infants ...	25.3	49.6	44.2	35.1	39.6	38.4	33.8	55.4	49.4	37.0	13654	611	44.7
Mortality rate for infants partly fed on breast and partly on bottle ..	515.1	122.2	378.4	171.7	407.7	152.0	141.7	181.2	155.3	116.3	1037	232	223.7
Mortality rate for infants fed by bottle ...	324.3	520.4	230.3	209.8	229.2	212.5	117.1	117.6	42.9	117.6	1843	564	306.0

Infant Mortality and Rainfall.

Year.	Rainfall in Inches.	Number of days on which rain fell.	Infant Mortality.
1909	33.13	162	123.6
1910	29.64	197	110.0
1911	30.20	181	145.0
1912	30.01	217	102.4
1913	27.53	194	127.1
1914	28.31	201	122.4
1915	28.28	183	144.3
1916	38.97	228	101.5
1917	29.13	176	106.5
1918	33.65	190	126.8
1919	25.21	191	107.9
1920	32.11	211	80.0
1921	29.83	205	105.3
1922	28.55	209	81.2
1923	36.53	231	82.9
1924	35.11	210	95.0
1925	32.17	189	78.4
1926	34.70	201	81.9

Illegitimacy.

The number of illegitimate births registered was 69, or 59.5 per 1,000 registered births, being 5.9 per 1,000 greater than the figure for 1925. The number of deaths amongst these children was 4, or 58 per 1,000 illegitimate births. The deaths of legitimate children numbered 91, or 83.5 per 1,000 legitimate births. The Health Visitors paid 72 visits to children nursed or maintained by persons other than the parents.

Puerperal Fever and Puerperal Pyrexia.

5 notifications relating to puerperal fever were received, and 2 of these patients died. In one of these, however, the Assistant Medical Officer, who saw the case with the patient's own doctor, was of the opinion that the death was due to primary pneumonia, the patient having shown symptoms of this illness before the confinement, which appears to have been in all respects normal. In the

other instance the confinement had been a difficult one, involving the use of instruments, which caused some laceration.

Of the other 3 notified cases, 1 was probably gonorrhœal in origin, the symptoms being slight, and the other two were cases of phlebitis who ultimately made a good recovery.

3 notifications relating to puerperal pyrexia were received.

Ophthalmia Neonatorum.

10 cases of ophthalmia neonatorum were notified. 6 cases were notified by medical practitioners, and 4 by midwives. The discharge was purulent in 9 instances, and in the remaining instance, in which the case was notified by a midwife, the symptoms were so slight as to warrant the case not being classified as a true ophthalmia.

In 7 instances both eyes were affected, and in the remaining 3 cases only one eye was affected.

8 of these children survived, and there was no permanent damage to the eyes. The remaining 2 infants died of a concurrent disease while under treatment for the eye condition.

In connection with these cases, the Health Visitors of the Corporation paid 32 special visits to affected babies, in order to ensure arrangements for appropriate treatment.

In 1 of the fatal cases the child was admitted to the Cumberland Infirmary for treatment, and in two other instances the children were treated at that Institution as out-patients, in one of which, however, the nurses of the District Nursing Association treated the eyes in the intervals between the attendances at the Infirmary. In the other fatal case, the ophthalmia was attended to by the nurses of the District Nursing Association under the scheme of the Local Authority, and in one instance the

condition was treated at the Corporation Infant Clinic. One baby was an inmate of Fusehill Poor Law Infirmary, and in the remaining 4 instances, which showed only slight symptoms, treatment was received at home under the direction of the medical practitioner in attendance.

CASES.			Vision un- impaired	Vision impaired	Total Blind- ness.	Deaths during treat- ment.	Remarks.
Noti- fied.	Treated.						
	At Home.	In Hos- pital.					
10	8	2	8	Nil.	Nil.	2	

Infectious Diseases.

The Health Visitors paid 2,443 visits to cases of zymotic diseases, in addition to their visits to children suffering from gastro-enteritis, ophthalmia neonatorum and pneumonia, and the cases of puerperal fever and puerperal pyrexia, the number of visits in this connection being nearly twice as many as in 1925.

Diarrhœa.

There were 21 deaths from diarrhœa during the year, and the Health Visitors paid 90 visits in connection with cases of diarrhœa and gastro-enteritis.

The following table shows the age incidence:—

Age.		No. of Deaths.	
0— 1 year	12
1— 2 years	2
2— 5 years	—
5—15 years	—
15—25 years	—
25—45 years	1
45—65 years	4
Over 65 years	2
			—
			21
			—

Poliomyelitis.

No notification relating to poliomyelitis was received during the year.

Deaths among Children aged 1—5 years.

48 deaths occurred among children aged 1—5 years from causes detailed hereunder:—

Whooping Cough	...	...	...	6
Measles	...	...	...	10
Diphtheria	...	...	...	5
Scarlet Fever	...	...	...	2
Pneumonia & Broncho-Pneumonia	...	...	...	11
Tubercular Meningitis	...	...	...	4
Abdominal Tuberculosis	...	...	...	1
Gastro-Enteritis	...	...	...	2
Other Diseases	...	...	...	7
				—
				48
				—

The chief feature as regards the deaths of children aged 1—5 years was the increase during 1926 of deaths from zymotic diseases.

HYGIENE OF PLACES OF PUBLIC ENTERTAINMENT.

The visits made in this connection will be found on pages 76 and 82.

REPORT OF THE VETERINARY INSPECTOR.

During the year 152 newly-purchased cows were examined in the several byres of the City, amongst which the following conditions were found:—

Poor condition	...	...	...	3
Septicæmia	...	...	...	2
Enlarged gland in throat	...	...	...	1
				—
				6
				—

All 6 animals were returned to the sellers.

The bovine animals exposed for sale at the Sands Cattle Market, and also at the Auction Marts, were examined, a total of 69,086 examinations being made.

The Auction Marts were visited each Monday in the year, and 14,905 pigs were examined.

194,501 sheep were also examined during the year.

A total of 3,326 examinations of milk cows were made in the several byres of the City in order to ascertain the presence of disease likely to affect the milk supply, in the course of which the following conditions were found:—

Gastric derangement	...	...	...	1
Milk fever	...	...	...	1
Chill	...	...	...	3
Defective udder	...	...	...	2
Septicæmia	...	...	...	2
Abortion	...	...	...	4
Mastitis	...	...	...	2
				<hr/>
				15
				<hr/>

The milk from these 15 animals was destroyed until convalescence was established.

One cow died from internal hæmorrhage following calving.

Intimations of the sudden deaths of two pigs were received, and post-mortem examination revealed in each instance heart disease as cause of death.

During the evening of 25th May an intimation was received that the carcasses of 86 pigs out of a cargo in which carcasses affected with foot and mouth disease had been found, had arrived in the City. The feet and heads of the 86 pigs were examined and evidence was found of foot and mouth disease, which was subsequently confirmed by an Inspector of the Ministry of Agriculture and Fisheries.

The cattle, sheep, and pigs in the surrounding neighbourhood were dealt with in accordance with Form D. of the orders of the Ministry of Agriculture and Fisheries.

This stock was examined every second day; a total of 1,043 examinations were made.

On 21st April I was informed by the Medical Officer of Health that a sample of milk from a dairy outside the City had been found to contain tubercle bacilli. On 24th April I accompanied the Veterinary Inspector for the Cumberland County Council to the farm, when 46 dairy cattle were examined; 3 cows were found to be affected with disease of the udder, and they were removed from the byres. Samples of milk were taken and submitted to bacteriological examination and notices under the Tuberculosis Order, 1925, were served on the owner prohibiting the use of the milk.

During the year 39,210 imported cattle passed through the Sands Authorised Market, in connection with the movement of which 2,252 licences in quadruple have been issued by the Police.

On November 1st notice was received that two pigs had been found dead in piggeries inside the City boundary. On visiting the piggeries I found there 89 live pigs and 2 carcasses of pigs. On examination I found 13 pigs to be ailing. The matter was reported to the Ministry of Agriculture and Fisheries, whose Inspector confirmed Swine Fever to be in existence. The usual order was served on the owner by the Police.

Tuberculosis Order, 1925.

10 cows have been dealt with under the above Order.

Animals (Landing from Ireland) Order, 1922.

940 examinations have been made of animals detained under the above Order.

At the request of the Medical Officer of Health and Chief Sanitary Inspector I made post-mortem examinations at the Public Slaughter-houses on 1 carcass of pork and 3 carcasses of beef, all of which I certified to be unfit for human food.

Chief Inspector's Annual Report.

To the Chairman and Members of the Health Committee.
Ladies and Gentlemen,

I have the honour to submit my Annual Report upon the work of the Sanitary Inspectors during the year 1926.

HOUSING.

90 houses were specially inspected, and particulars recorded under the Housing Acts during the year. These houses constitute an area which is bounded by Robert Street, South John Street, Currock Street, and Water Street, and which is adjacent to the recently improved Crown Street area.

It was ascertained that the block contains:—

22	one-roomed houses
46	two-roomed houses
16	three-roomed houses
5	four-roomed houses
1	five-roomed house

90

Included in this number are two shop premises.

The density of the particular area is not so great as the Crown Street area referred to, being 86.4 houses to the acre, and averaging 1.77 persons per room. Yet serious overcrowding was found in 13 cases, and some of the houses are unfit.

It is not suggested that this area should be dealt with by an improvement scheme, but to apply the Repair Sections of the Acts as far as possible.

A report was presented to the Committee in November last, giving information regarding the situation and description of some 434 houses, comprising 46 different properties in the City, and containing certain recommendations relative to the action which should be taken to bring about an improvement, and it was decided that the Health Committee visit the properties enumerated therein early in the New Year.

36 new houses were built at Peel Street, expressly for the accommodation of 38 tenants de-housed under an Improvement Scheme in Queen Street and Rigg Street, and much work was entailed in effecting exchanges on behalf of those tenants who were unable or unwilling to take new houses directly.

Only 6 of the families concerned elected to take new houses, leaving 32 to be housed by the method of exchange referred to in last year's report.

24 houses were erected on the Currock Estate in connection with the demolition scheme for South George Street and South John Street. Of the 36 tenants who were living in the houses demolished in this area, only 5 occupy the new houses, the remaining 31 families being accommodated elsewhere by means of an exchange of house through the efforts of your Inspectors. Several families from the demolished houses in the Crown Street area were, however, also living in this block prior to demolition, and considerable difficulty was experienced in re-housing these tenants a second time, as in some instances private owners were very unwilling to accept them as tenants.

The property upon the two sites referred to (numbering 74 houses) has been demolished, and the sites cleared and fenced in.

4 houses belonging to the Corporation, in Rayson's Court, Drovers Lane, and Highland Laddie Lane were demolished. 8 houses on the West Walls side and 4 at the Caldewgate side have been demolished in connection with the widening of Caldew Bridge.

NUISANCES AND DRAINAGE.

The number of nuisances investigated by members of the staff was 685, of which 107 were in respect of complaints received, the remainder being located by the Inspectors.

340 notices were served, and at the close of the year 35 matters were still on the books.

13 new drains were laid under my supervision, and 16 repaired. The number of drains inspected was 1,006, and in addition 91 tests, either olfactory or water, were applied.

CONVERSION TO WATER CARRIAGE SYSTEM.

In consequence of statutory notices, 20 pail-closets were converted into water-closets at Greystone and 2 at Botcherby, and 3 new water-closets were erected without notice.

During the year 29 statutory notices were served, requiring conversions from middens and pails at certain railway properties. These works are not yet executed.

VAN DWELLINGS.

The usual inspections of van dwellings at the Sands and one or two other places were made, and, with the exception of frequent verbal notices to occupiers respecting fouling of adjacent ground, no faults were found.

COMMON LODGING-HOUSES.

There is no registered common lodging-house in the City, the only known lodging-house where men are received for short periods being the one owned and controlled by the Corporation, viz., Lowther House, situate at Drovers Lane.

STABLE PREMISES.

The number of inspections was 243, there being approximately 120 stable premises in the City.

FACTORIES AND WORKSHOPS.

On the register there are at present 287 workshops. Of these, 71 are what are known as "domestic" workshops, and 75 bakehouses, 3 of which are underground. One bakehouse was enlarged and improved during the year, and the general standard of cleanliness was good.

The number of factories in the City is approximately 90. There were 586 visits paid to factories and workshops.

We have received only one notice from His Majesty's Inspector of Factories relating to a nuisance remediable under the Public Health Acts. This was subsequently remedied.

There were structural repairs executed at 2 premises where meat preparations are made.

SMOKE NUISANCES.

Many observations of black smoke emitted from factory chimneys were made, and in two instances informal action was taken on account of temporary nuisances created by the burning of inferior fuel during the coal strike.

Complaints were prevalent concerning the nuisance from Engine Sheds on the north side of the City, and the matter was again taken up, with some success, with the Railway Engineer's Department.

During the year a special report was made by the Medical Officer of Health and myself to the Health Committee concerning the cause, prevalence, etc., of black smoke from factories in the City. In the preparation of this report all the factories were visited, and particulars ascertained and recorded as to type and capacity of boilers and the means (if any) of preventing black smoke.

INSPECTION OF MEAT AND OTHER FOODS,

The amount of meat condemned during the year as unfit for human consumption was 27 tons 17 cwts. 2 qrs. 1 lb. Particulars of this and other miscellaneous food-stuffs found to be unfit for food are contained on page 76. There was an increase of some 4 tons of meat condemned over the figure for 1925. This is partly due to the number of diseased carcasses under the Tuberculosis Order, 1925, slaughtered at the Abattoir by arrangement with the County Council.

In October legal proceedings were taken under the Public Health Acts, 1875 and 1890, in respect of 140 unsound eggs sold in the Public Market. The vendor was fined £10 and costs.

SLAUGHTER-HOUSES.

There are no private slaughter-houses in the City, but two slaughter-houses are licensed for the special purpose of slaughtering sheep for the London and other markets, and one for the occasional slaughter of pigs at a Bacon Factory.

The Public Slaughter-houses, owned and controlled by this Department, have been kept satisfactorily. A table

showing the number and nature of the animals killed is given on page 78.

687 inspections were made to these slaughter-houses.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 19 registered producers of milk in the City, and 34 cowsheds are in use. A total of 73 inspections were made to these milk-producing premises.

There are on the register 61 purveyors of milk, 43 of whom reside in the City; in addition there are 15 milkshops. Frequent inspections are made to milkshops and retailers' premises, a total of 142 such inspections being made during the year.

One cowshed was supplied with town's water, and one milk retailer's premises improved during the year.

FRIED FISH AND POTATO SHOPS.

There are 34 vendors of fried fish and chipped potatoes on our register, as compared with 33 the previous year. The trade is carried on satisfactorily. At 2 shops, which changed occupation, the premises were improved. 215 inspections were made to these premises.

ICE CREAM SHOPS.

18 persons are on the register of ice-cream retailers, although in addition, the trade is carried on in a small way at restaurants, etc. The premises in which this commodity is sold are under frequent supervision, and the trade is conducted in a satisfactory manner. The premises of 1 retailer were improved by the removal of an inside drain, and the introduction of ventilation.

FOOD AND DRUGS ACTS.

A total of 165 samples were purchased during the year under the above Acts, and full particulars of the nature of the samples and results of the analyses will be found on page 77. Of the 8 samples which were adulterated, 7 of the vendors received cautions, and one milk vendor was prosecuted in connection with a sale of milk deficient in milk fat. The case was dismissed.

OFFENSIVE TRADES.

The number and description of these trades is the same as in previous years, viz., 2 tripe boilers, 1 gut scraper, 1 tanner, and 1 fellmonger.

During the year a licence was granted under the provisions of Section 51 of the Public Health Acts Amendment Act, 1907, in respect of premises to be used as a depot for the reception during certain hours of the day of hides, skins, and fat.

No complaint of nuisance was received respecting any of these trades during the year.

URINALS.

The public urinals in the City, 19 in number, including the underground lavatories, are cleansed under the supervision of this Department. During the year 1 urinal was demolished and rebuilt, and two more are in process of being rebuilt.

REFUSE REMOVAL.

The removal of household and trade refuse is carried on as in previous years, *i.e.*, trade refuse is removed daily, and household refuse twice and thrice weekly, according to district. The whole of the refuse is disposed of by tipping at various tips, which are well kept.

During the year 21,251 loads of refuse were disposed of.

A special report is being submitted to the Committee on the S.D. Freighter, along with the recommendation to purchase two more Freighters of the same class.

The garbage from the Public Slaughter-houses was also disposed of by tipping, and amounted to 530 loads.

DEPOT.

In connection with the work of refuse removal and scavenging there are 20 horses kept at the Depot, compared with 19 in 1925. During the year 3 horses were bought and 2 sold. There is also garaged at the Depot one S.D. Freighter, employed in the removal of house refuse.

SHOPS ACTS.

In connection with the administration of these Acts 826 day and evening inspections were made. No legal proceedings were taken, but verbal cautions, respecting small breaches of the Act were given in a few instances.

INFECTIOUS DISEASE AND DISINFECTION.

326 cases of infectious disease were investigated during the year, and 167 of these were removed to Hospital. The number and description of articles of bed clothing, &c., disinfected are given on page 78.

RAT REPRESSION.

In consequence of complaints respecting rats on premises, 15 visits were made, and in some instances the drains tested, and advice given.

1,583 rats were received at the Depot during the year for which 2d. per head was paid.

HYGIENE OF PLACES OF PUBLIC ENTERTAINMENT.

Both day and night visits were made to the Picture and other entertainment halls at intervals. At one hall an improvement was made in the approach to and means of indication of a ladies' lavatory.

DISEASED AND UNSOUND FOOD.

The following table shows the amount of food seized or surrendered as being unfit for human consumption:—

Nature of Food Condemned.	Quantity.			
	Tons.	Cwts.	Qrs.	Lbs
Beef ...	25	2	0	9
Mutton ...	1	3	1	26
Pork	1	0	3	25
Veal ...	0	10	3	25
Total ..	27	17	2	1
Tinned Meats ...	612 lbs.			
Pears ...	2½ boxes			
Kippers ...	10 "			
Flounders ...	3 "			
Herrings ...	1 "			
Eggs ...	208			

SALE OF FOOD AND DRUGS ACTS.

Table showing articles purchased during the year, with results of analyses and remarks as to action taken thereon.

Article.	No. of Samples.	No found to be Genuine.	Number Adulterated.	Extent and Form of Adulteration.	Remarks.
Milk ...	52	48	4	<i>a.</i> Non-fatty solids 0·13% below limit <i>b.</i> Milk fat 0·35% below limit <i>c.</i> Milk fat 0·10% below limit <i>d.</i> Milk fat 0·21% below limit	Vendor cautioned. Samples <i>b</i> and <i>c</i> , from same source. Vendor cautioned. Vendor proceeded against. Case dismissed.
Butter ...	21	21	...	...
Cream ..	11	10	1	Contained 0·10% Boric Acid	Vendor cautioned <i>re</i> labelling.
Coffee ...	4	4	...	...
Olive Oil .	5	5	...	...
Fruit Wines	5	5	...	...
Jams ...	6	6	...	...
Fruits ...	14	14	...	...
Sausages ...	11	10	1	Contained 1·30% Boric Acid	Vendor cautioned.
Icing Sugar	3	3	...	...
Baking Powder	5	5	...	...
Lard ...	5	5	...	...
Ground Ginger	5	5	...	...
Ground Cinnamon	6	6	...	...
Ground Mace ...	6	6	...	...
Sweet Nitre	6	4	2	<i>a</i> Deficient in Ethyl Nitrite 5·40% <i>b</i> Deficient in Ethyl Nitrite 14·00%	Vendor cautioned. Vendor cautioned.
No. of Samples	165				
No. Genuine	...	157			
No. Adulterated	...	...	8		

The following Tables give the number of animals killed annually during the past five years:—

PUBLIC ABATTOIR.

Year.	Beasts.	Sheep and Lambs.	Calves.	Pigs.	Total.
1922	3,512	16,294	518	4,711	25,035
1923	4,028	13,249	768	4,644	22,689
1924	4,106	14,385	436	5,896	24,823
1925	4,343	13,814	372	5,775	24,404
1926	4,478	14,889	285	4,712	24,364

L.M. & S. RAILWAY SLAUGHTER-HOUSE.

1922	...	40,790	...	...	40,790
1923	...	26,121	...	...	26,121
1924	...	39,427	...	...	39,427
1925	...	48,279	...	...	48,279
1926	...	46,745	...	...	46,745

L. & N.E. RAILWAY SLAUGHTER-HOUSE.

1922	...	55,926	...	...	55,926
1923	...	39,897	...	...	39,897
1924	...	64,811	...	...	64,811
1925	...	79,906	...	...	79,906
1926	...	72,232	...	...	72,232

HARRABY BACON FACTORY.

1926	248	248
------	----	----	-----	-----	-----

REFUSE REMOVAL.

Number of Loads of House Refuse removed to		
Tips	...	21,251
,, Loads of Slaughter-house Garbage		530

DISINFECTION.

Number of cases of Infectious Diseases Investi-		
gated	...	326
,, Cases of Infectious Disease removed		
to Hospital	...	167
,, Mattresses and Beds Disinfected	...	46
,, Bolsters and Covers	,,	85
,, Pillows and Covers	,,	80
,, Blankets	...	155
,, Quilts	...	30
,, Miscellaneous Articles	,,	145
,, Carpets, &c., Disinfected	...	15
,, Rooms Disinfected	...	350

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—Inspection of Factories, Workshops, & Workplaces.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
FACTORIES	85	Nil	Nil
WORKSHOPS	501	3	Nil
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)			
TOTAL	586	3	Nil

3.—Home Work.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.					
	Lists received from Employers.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con- tractors.	Work- men.		Con- tractors.	Work- men.
Wearing apparel— Making, &c. ...	2	...	...	1	...	..
Cleaning and Washing ...	...	...	...	...	..	..
Total ...	2	...	...	1	...	...

2.—Defects found in Factories, Workshops, and Workplaces.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	23	23	...	..
Want of ventilation	2	1	...	..
Overcrowding... ..	...	...	...	...
Want of drainage of floors ...	...	...	...	...
Other nuisances	12	12	...	...
Sanitary accommodation :—				
{ Insufficient ... ..	...	...	...	..
{ Unsuitable or defective	3	3	...	..
{ Not separate for sexes	...	...	...	..
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)...	...	...	...	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ...	...	...	...	..
Other offences (Excluding offences relating to outwork, which are included in Part 3 of this report)	...	...	...	..
Total	40	39	Nil	Nil

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year		Number.
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Workshops	141
	Domestic Workshops ...	71
	Bakehouses	74
	Total number of workshops on Register ...	286

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901) .. ..	..
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory & Workshop Acts (s. 5, 1901) :—	
Notified by H.M. Inspector	1
Reports (of action taken) sent to H.M. Inspector	1
Other ... ..	...
Underground Bakehouses (s. 101) —	
In use at the end of the year	3

6.—Classified List of Workshops.

Business.	No.	Business.	No.
Millinery	19	Hand-weavers	2
Tailoring	30	Fishing Tackle	2
Sugar Boiling	2	Stocking Knitting... ..	1
Cycle Repairing	8	Scale Repairers	2
Dressmaking	21	Picture Framing	2
Bakehouses	74	Photography	4
Boot Repairing, Cloggers ...	45	Tripe Boiling	2
Saddlery	5	Chocolate Making	1
Meat Preparation	30	Marine Dealers	4
Watch Makers, Jewellers ...	15	Gut Scraper	1
Upholstering	4	Fellmonger	1
Coopers	2	Tanner	1
Basket Making	2	Engraver	1
Umbrella Repairing	1	Wagon Sheet Repairer ...	1
Taxidermist	1		
Tinsmiths	2	Total	286

SUMMARY OF SANITARY WORK PERFORMED IN CONNECTION WITH INSPECTION OF DISTRICT.

Nature of Inspections.	Number of visits paid.
HOUSES—	
Houses inspected under Housing Acts ...	2102
Houses inspected in accordance with the Housing (Inspection of District) Regulations, 1910...	90
Houses inspected under the Public Health Act, 1875	3583
Houses inspected, special inquiry	32
Visits <i>re</i> Infectious Diseases	927
Drains Inspected	1006
„ Tested	91
Nuisances from Fowls and Animals... ..	12
Common Yards, Courts, & Alleys inspected ...	5681
Temporary or movable dwellings inspected ...	353
Public Halls, Schools, etc.... ..	40
Complaints investigated	107
Nuisances investigated	685
TRADE PREMISES—	
Bakehouses	205
Laundries	3
Cowsheds	78
Milkshops	142
Ice-Cream Shops	55
Fried Fish Shops	215
Meat Preparation Premises	295
Slaughter-houses	687
Markets	129
Factories	85
Workshops and Workplaces	296
Stables	243
Shops Act Inspections	826
Chimneys observed (smoke nuisances) ...	17
Refuse Tips	110
Water samples taken for analysis	8
Visits <i>re</i> Rats and Mice Destruction Order ...	15
Miscellaneous inspections	2036
Urinals	52
Notices served to abate Nuisances	340
„ complied with	305

HOUSING WORKS DONE BY NOTICES UNDER THE PUBLIC HEALTH ACTS.

Walls, Damp and Defective, Remedied ...	...	12
Roofs Repaired ...	...	12
Yards Paved and Repaired ...	...	6
Ceilings Repaired ...	...	4
Washhouses Repaired ...	...	5
Firegrates and Ovens Repaired ...	...	7
Chimney Stacks Repaired ...	...	3
Floor Repaired ...	...	1
Defective Outbuildings Repaired ...	...	7

Housing Works done without Notice.

Houses provided with New Damp Courses ...	...	5
do. do. New Roof ...	...	1
do. do. New Floor ...	...	1
Back-to-back Houses converted into through Houses ...	...	3
Houses cement rendered or plastered ...	...	24
Houses provided with new W.C.s. ...	...	2

I have the honour to be,

Your obedient Servant,

C. W. HILL,

Chief Inspector.



